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 <212> PRT
 <213> Homo sapiens

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 Pro Pro Glu Ala Cys Leu Pro Ser Ala Lys Pro Val Gly Gln Pro Thr

-7787/13211-

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Pro	Lys	Leu	Pro	Glu	Asn	Gln	Thr	Ser	Pro	Gly	Glu	Ser	Pro	Glu	Arg
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Trp	Pro	Thr	Leu	Phe	Ser	Tyr	Tyr	Asn	Ile	Thr	Leu	Ala	Lys	Arg	Tyr
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Pro Thr Gln Pro Glu Pro Arg His Arg Ala Val Cys Gly Arg Ser Arg		
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Leu Gly Thr His Thr Ala Leu Ser Pro Leu Gln Phe Arg Gly Thr Pro		
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Gly Arg Gly Ser Ser Pro Ala Ser Pro Val Tyr Ser Ser Ser Asp Thr		
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Val Ala Cys His Leu Thr His Thr Val Pro Cys Ala His Gln Glu Pro		
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Asp His Thr Leu Arg Val Phe Arg Leu Glu Asp Ser Cys Cys Leu Phe		
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Thr Leu Gln Gly His Ser Gly Ala Ile Thr Thr Val Tyr Ile Asp Gln		
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Thr Met Val Leu Ala Ser Gly Gly Gln Asp Gly Ala Ile Cys Leu Trp		
	740	745
Asp Val Leu Thr Gly Ser Arg Val Ser His Val Phe Ala His Arg Gly		
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Asp Val Thr Ser Leu Thr Cys Thr Thr Ser Cys Val Ile Ser Ser Gly		
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Leu Asp Asp Leu Ile Ser Ile Trp Asp Arg Ser Thr Gly Ile Lys Phe		
785	790	795
Tyr Ser Ile Gln Gln Asp Leu Gly Cys Gly Ala Ser Leu Gly Val Ile		
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Ser Asp Asn Leu Leu Val Thr Gly Gly Gln Gly Cys Val Ser Phe Trp		
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Asp Leu Asn Tyr Gly Asp Leu Leu Gln Thr Val Tyr Leu Gly Lys Asn		
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 <213> Homo sapiens

<220>
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 <222> (94).. (1212)

<400> 14102

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<213> Homo sapiens

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Asn Val Ala Ala Leu Arg Ala Ser Val Glu Thr Gly Phe Ala Lys Lys
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Thr Phe Ile Ser Tyr Ser Val Thr Phe Lys Asp Asn Phe Arg Gln Gly
65 70 75 80
Leu Val Val Gly Ile Asp Leu Lys Asn Gln Met Val Leu Leu Gln Gly
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Gly Glu Ala Leu Pro Phe Ser His Leu Ile Leu Ala Thr Gly Ser Thr
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Gly Pro Phe Pro Gly Lys Phe Asn Glu Val Ser Ser Gln Gln Ala Ala
115 120 125
Ile Gln Ala Tyr Glu Asp Met Val Arg Gln Val Gln Arg Ser Arg Phe

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-7791/13211-

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Val Ser Asn Leu Glu Glu Leu Pro Leu Asn Glu Tyr Arg Glu Tyr Ile				
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Leu Cys Thr Gly Ile Lys Ile Asn Ser Ser Ala Tyr Arg Lys Ala Phe				
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009629469.072800

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<212> PRT

<213> Homo sapiens

<400> 14107

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Glu	Gly	Arg	Cys	Ser	Ser	Ser	Asp	Asp	Asp	Thr	Asp	Val	Asp	Met	Glu
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Asp	Gly	Val	Cys	Leu	Ser	Gly	Asp	Arg	Gly	Pro	Gln	Gly	Asp	Lys	Ala
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Ile	Arg	Glu	Gln	Gly	Pro	Arg	Glu	Gln	Glu	Pro	Glu	Leu	Ser	Phe	Pro
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-7798/13211-

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Gln Lys Ser His Phe Gln Asn Ser Arg Glu Trp Ser Gly Lys Glu Lys
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Trp Trp Asp Gly Gln Arg Asp Arg Lys Ala Glu His Trp Lys His Lys
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545                      550                      555                      560
Gly Val Asp Glu Cys Ala Arg Gln Glu Gly Leu Thr Phe Phe Gly Thr
                      565                      570                      575
Glu Leu Ala Pro Val Arg Gln Gln Glu Leu Ala Ser Leu Leu Arg Thr
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Tyr Leu Ala Arg Leu Pro Trp Ala Gly Gln Leu Thr Lys Glu Leu Pro
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Leu Ser Pro Ala Phe Phe Gly Glu Asp Gly Ile Phe Arg His Asp Arg
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Leu Arg Phe Arg Asp Phe Val Asp Ala Leu Glu Asp Ser Leu Glu Glu
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Val Ala Val Gln Gln Thr Gly Asp Asp Asp Glu Val Asp Asp Phe Glu
                      645                      650                      655
Asp Phe Ile Phe Ser His Phe Phe Gly Asp Lys Ala Leu Lys Lys Arg
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 <212> DNA
 <213> Homo sapiens

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<222> (239).. (1144)

<400> 14108

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Ala	Gly	Ser	Pro	Thr	Arg	Asp	Arg	Asp	Val	Asp	Val	Leu	Ser	Ala					
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<210> 14111
<211> 237

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<212> PRT

<213> Homo sapiens

<400> 14111

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20 25 30
Cys Leu Leu Glu Phe Ala Arg Leu Val Arg Gly Leu Gly Leu Lys Pro
35 40 45
Glu Lys Leu Glu Lys Asp Leu Asp Arg Tyr Ser Glu Arg Ala Arg Met
50 55 60
Lys Gly Gly Glu Lys Ile Gly Ile Ala Glu Phe Ala Ala Ser Leu Glu
65 70 75 80
Val Pro Val Ser Asp Leu Leu Glu Asp Met Phe Ser Leu Phe Asp Glu
85 90 95
Ser Gly Ser Gly Glu Val Asp Leu Arg Glu Cys Val Val Ala Leu Ser
100 105 110
Val Val Cys Arg Pro Ala Arg Thr Leu Asp Thr Ile Gln Leu Ala Phe
115 120 125
Lys Thr Tyr Gly Ala Gln Glu Asp Gly Ser Val Gly Glu Gly Asp Leu
130 135 140
Ser Cys Ile Leu Lys Thr Ala Leu Gly Val Ala Glu Leu Thr Val Thr
145 150 155 160
Asp Leu Phe Arg Ala Ile Asp Gln Glu Glu Lys Gly Lys Ile Thr Phe
165 170 175
Ala Asp Phe His Arg Phe Ala Glu Met Tyr Pro Ala Phe Ala Glu Glu
180 185 190
Tyr Leu Tyr Pro Asp Gln Thr His Phe Glu Ser Cys Ala Glu Thr Ser
195 200 205
Pro Ala Pro Ile Pro Asn Gly Phe Cys Ala Asp Phe Ser Pro Glu Asn
210 215 220
Ser Asp Ala Gly Arg Lys Pro Val Arg Lys Lys Leu Asp
225 230 235

<210> 14112

<211> 1575

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (174).. (1337)

<400> 14112

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tacggcggcg catgctaggg gattctgccg ggtagaagag ctgggcctgg aaccagccc 120

09629469-072800


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tggggcagga tgctgtgcgg cggtcagtgg ccaggggcagc ctcgagtgca agcctggaat 300
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gggaccagga gccctcaggg aggcctgggtg atccaggacc ccaggaggca cagacccga 600
ggtccatcct ggctcaacag agcaagctgt ccaagcccag ggtgaccttc tctgaggagt 660
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cccagctgtc ctaggttggg cagggtgggtg gacccaagct tgtctgctgc ctgagttcca 1500
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<210> 14113
 <211> 388
 <212> PRT
 <213> Homo sapiens

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<400> 14113
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             20             25             30
Ala Arg Ala Ala Ser Glu Ser Ser Leu Glu Ser Ser Ser Ser Tyr Asn
             35             40             45
Ser Glu Thr Pro Ser Thr Pro Glu Thr Ser Ser Thr Ser Leu Ser Thr
             50             55             60
Ser Cys Pro Arg Gly Arg Ser Ser Val Trp Gly Pro Pro Asp Ala Cys
             65             70             75             80
Arg Gly Asp Leu Arg Asp Val Ala Arg Ser Gly Val Ala Ser Leu Pro
             85             90             95
Pro Ala Asn Cys Gln His Gln Glu Ser Leu Gly Arg Pro Arg Pro His
             100             105             110
Ser Ala Pro Ser Leu Gly Thr Ser Ser Leu Arg Asp Pro Glu Pro Ser

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-7804/13211-

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      115      120      125
Gly Arg Leu Gly Asp Pro Gly Pro Gln Glu Ala Gln Thr Pro Arg Ser
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Ile Leu Ala Gln Gln Ser Lys Leu Ser Lys Pro Arg Val Thr Phe Ser
145      150      155      160
Glu Glu Ser Ala Val Pro Glu Arg Ser Trp Arg Leu Arg Pro Tyr Leu
      165      170      175
Gly Tyr Asp Trp Ile Ala Val Ser Leu Asp Thr Ser Ser Ser Ile Thr
      180      185      190
Ser Gln Pro Glu Ala Phe Phe Ser Lys Leu Gln Glu Phe Arg Glu Thr
      195      200      205
Asn Lys Glu Glu Cys Ile Cys Ser His Pro Glu Pro Gln Leu Pro Gly
      210      215      220
Leu Arg Glu Ser Ser Gly Ser Gly Val Glu Glu Asp His Glu Cys Val
225      230      235      240
Tyr Cys Tyr Arg Val Asn Arg Arg Leu Phe Pro Val Pro Val Asp Pro
      245      250      255
Gly Thr Pro Cys Arg Leu Cys Arg Thr Pro Arg Asp Gln Gln Gly Pro
      260      265      270
Gly Thr Leu Ala Gln Pro Ala His Val Arg Val Ser Ile Pro Leu Ser
      275      280      285
Ile Leu Glu Pro Pro His Arg Tyr His Ile His Arg Arg Lys Ser Phe
      290      295      300
Asp Ala Ser Asp Thr Leu Ala Leu Pro Arg His Cys Leu Leu Gly Trp
305      310      315      320
Asp Ile Phe Pro Pro Lys Ser Glu Lys Ser Ser Ala Pro Arg Asn Leu
      325      330      335
Asp Leu Trp Ser Ser Val Ser Ala Glu Ala Gln His Gln Lys Leu Ser
      340      345      350
Gly Thr Ser Ser Pro Phe His Pro Ala Ser Pro Met Gln Met Leu Pro
      355      360      365
Pro Thr Pro Thr Trp Ser Val Pro Gln Val Pro Arg Pro His Val Pro
      370      375      380
Arg Gln Lys Pro
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<210> 14114
 <211> 1614
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (41).. (733)

<400> 14114
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ccggaagaat tttgatgagg ctgccaaggt gttgaagttt aactgtgaag agaaccagca 240
cagtgatagc tgctacaaac tgggggcccc ctatgtgact ggaaaagggtg gtctgaccca 300
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<210> 14115
 <211> 231
 <212> PRT
 <213> Homo sapiens

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<400> 14115
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          20             25             30
Asp Pro Asp Gly Cys Tyr Arg Leu Val Asp Tyr Leu Glu Gly Ile Arg
          35             40             45
Lys Asn Phe Asp Glu Ala Ala Lys Val Leu Lys Phe Asn Cys Glu Glu
          50             55             60
Asn Gln His Ser Asp Ser Cys Tyr Lys Leu Gly Ala His Tyr Val Thr
          65             70             75             80
Gly Lys Gly Gly Leu Thr Gln Asp Leu Lys Ala Ala Ala Arg Cys Phe
          85             90             95
Leu Met Ala Cys Glu Lys Pro Gly Lys Lys Ser Ile Ala Ala Cys His
          100             105             110

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Asn Val Gly Leu Leu Ala His Asp Gly Gln Val Asn Glu Asp Gly Gln
 115 120 125
 Pro Asp Leu Gly Lys Ala Arg Asp Tyr Tyr Thr Arg Ala Cys Asp Gly
 130 135 140
 Gly Tyr Thr Ser Ser Cys Phe Asn Leu Ser Ala Met Phe Leu Gln Gly
 145 150 155 160
 Ala Pro Gly Phe Pro Lys Asp Met Asp Leu Ala Cys Lys Tyr Ser Met
 165 170 175
 Lys Ala Cys Asp Leu Gly His Ile Trp Ala Cys Ala Asn Ala Ser Arg
 180 185 190
 Met Tyr Lys Leu Gly Asp Gly Val Asp Lys Asp Glu Ala Lys Ala Glu
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 Val Leu Lys Asn Arg Ala Gln Gln Leu His Arg Glu Gln Gln Lys Gly
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 Val Gln Pro Leu Thr Phe Gly
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<210> 14116
 <211> 3001
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (272).. (2692)

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t 3001

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<210> 14117
 <211> 807
 <212> PRT
 <213> Homo sapiens

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<400> 14117
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             20             25             30
Tyr Asn Ser Ala Lys Asn Ser Thr Val Leu Gln Gly Val Thr Phe Gly
             35             40             45
Gly Ile Pro Thr Val Leu Leu Ile Asp Val Ser Cys Phe Leu Phe Leu
             50             55             60
Ile Leu Val Phe Ser Ile Ile Arg Arg Arg Phe Trp Asp Tyr Gly Arg

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009220"69462960

-7808/13211-

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Ile	Ala	Leu	Val	Ser	Glu	Ala	Asp	Ser	Glu	Ser	Arg	Phe	Gln	Arg	Leu	
				85					90					95		
Ser	Ser	Thr	Ser	Ser	Ser	Gly	Gln	Gln	Asp	Phe	Glu	Asn	Glu	Leu	Gly	
			100					105					110			
Cys	Cys	Pro	Trp	Leu	Thr	Ala	Ile	Phe	Arg	Leu	His	Asp	Asp	Gln	Ile	
		115					120					125				
Leu	Glu	Trp	Cys	Gly	Glu	Asp	Ala	Ile	His	Tyr	Leu	Ser	Phe	Gln	Arg	
	130					135					140					
His	Ile	Ile	Phe	Leu	Leu	Val	Val	Val	Ser	Phe	Leu	Ser	Leu	Cys	Val	
145					150					155					160	
Ile	Leu	Pro	Val	Asn	Leu	Ser	Gly	Asp	Leu	Leu	Asp	Lys	Asp	Pro	Tyr	
			165					170					175			
Ser	Phe	Gly	Arg	Thr	Thr	Ile	Ala	Asn	Leu	Gln	Thr	Asp	Asn	Asp	Leu	
		180						185				190				
Leu	Trp	Leu	His	Thr	Ile	Phe	Ala	Val	Ile	Tyr	Leu	Phe	Phe	Thr	Val	
	195						200					205				
Gly	Phe	Met	Arg	His	His	Thr	Gln	Ser	Ile	Lys	Tyr	Lys	Glu	Glu	Asn	
	210					215					220					
Leu	Val	Arg	Arg	Thr	Leu	Phe	Ile	Thr	Gly	Leu	Pro	Arg	Asp	Ala	Arg	
225					230					235					240	
Lys	Glu	Thr	Val	Glu	Ser	His	Phe	Arg	Asp	Val	Tyr	Pro	Thr	Cys	Glu	
			245					250						255		
Val	Val	Asp	Val	Gln	Leu	Cys	Tyr	Asn	Val	Ala	Lys	Leu	Ile	Tyr	Leu	
		260					265						270			
Cys	Lys	Glu	Lys	Lys	Lys	Thr	Glu	Lys	Ser	Leu	Thr	Tyr	Tyr	Thr	Asn	
	275						280					285				
Leu	Gln	Val	Lys	Thr	Gly	Gln	Arg	Thr	Leu	Ile	Asn	Pro	Lys	Pro	Cys	
	290					295					300					
Gly	Gln	Phe	Cys	Cys	Cys	Glu	Val	Leu	Gly	Cys	Glu	Trp	Glu	Asp	Ala	
305					310					315					320	
Ile	Ser	Tyr	Tyr	Thr	Arg	Met	Lys	Asp	Arg	Leu	Leu	Glu	Arg	Ile	Thr	
			325					330					335			
Glu	Glu	Glu	Arg	His	Val	Gln	Asp	Gln	Pro	Leu	Gly	Met	Ala	Phe	Val	
		340					345					350				
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	355					360						365				
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	370					375					380					
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385					390					395					400	
Ala	Asp	Pro	Glu	Asp	Ile	Cys	Trp	Lys	Asn	Leu	Ser	Ile	Gln	Gly	Leu	
			405					410						415		
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		420					425						430			
Leu	Phe	Phe	Leu	Thr	Thr	Pro	Ser	Ile	Ile	Leu	Ser	Thr	Met	Asp	Lys	
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Phe	Asn	Val	Thr	Lys	Pro	Ile	His	Ala	Leu	Asn	Asn	Pro	Ile	Ile	Ser	

000220" 69462960

-7809/13211-

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Ser Ile Val Tyr Tyr Ser Thr Leu Leu Glu Ser His Trp Thr Lys Ser
485 490 495
Gly Glu Asn Gln Ile Met Met Thr Lys Val Tyr Ile Phe Leu Ile Phe
500 505 510
Met Val Leu Ile Leu Pro Ser Leu Gly Leu Thr Ser Leu Asp Phe Phe
515 520 525
Phe Arg Trp Leu Phe Asp Lys Thr Ser Ser Glu Ala Ser Ile Arg Leu
530 535 540
Glu Cys Val Phe Leu Pro Asp Gln Gly Ala Phe Phe Val Asn Tyr Val
545 550 555 560
Ile Ala Ser Ala Phe Ile Gly Asn Gly Met Glu Leu Leu Arg Leu Pro
565 570 575
Gly Leu Ile Leu Tyr Thr Phe Arg Met Ile Met Ala Lys Thr Ala Ala
580 585 590
Asp Arg Arg Asn Val Lys Gln Asn Gln Ala Phe Gln Tyr Glu Phe Gly
595 600 605
Ala Met Tyr Ala Trp Met Leu Cys Val Phe Thr Ala Ile Val Ala Tyr
610 615 620
Ser Ile Thr Cys Pro Ile Ile Ala Pro Phe Gly Leu Thr Tyr Ile Leu
625 630 635 640
Leu Lys His Met Val Asp Arg His Asn Leu Tyr Phe Val Tyr Leu Pro
645 650 655
Ala Lys Leu Glu Lys Gly Ile His Phe Ala Ala Val Asn Gln Ala Leu
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675 680 685
Arg Leu Gly Met Lys Ala Pro Ala Thr Leu Phe Thr Phe Leu Val Leu
690 695 700
Leu Leu Thr Ile Leu Val Cys Leu Ala His Thr Cys Phe Gly Cys Phe
705 710 715 720
Lys His Leu Ser Pro Leu Asn Tyr Lys Thr Glu Glu Pro Ala Ser Asp
725 730 735
Lys Gly Ser Glu Ala Glu Ala His Met Pro Pro Pro Phe Thr Pro Tyr
740 745 750
Val Pro Arg Ile Leu Asn Gly Leu Ala Ser Glu Arg Thr Ala Leu Ser
755 760 765
Pro Gln Gln Gln Gln Gln Gln Thr Tyr Gly Ala Ile His Asn Ile Ser
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gcagcccgtg agcgagggtg agactcgggt gatagcgtgc gatggcggcg ggggagctct 300
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ctgtgggctc cagttcagac agcaccacca ctagagcgtg tggcacgccg ggggtcccgc 420
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Lys Asp Tyr Arg Arg Ile Arg Phe Val Gly Arg Gln Lys Glu Val Asn
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Glu Asn Phe Ala Ile Asp Leu Ile Ala Glu Gln Pro Val Ser Glu Val
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Glu Thr Arg Val Ile Ala Cys Asp Gly Gly Gly Gly Ala Leu Gly His
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<213> Homo sapiens

<400> 14121

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Val Glu Val Tyr Gly Phe Asp Tyr Asp Tyr Thr Leu Ala Gln Tyr Ala
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Asp Ala Leu His Pro Glu Ile Phe Ser Thr Ala Arg Asp Ile Leu Ile
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Arg	Ile	Ile	Asn	Thr	Glu	Gln	Tyr	Met	His	Ser	Leu	Thr	Trp	Gln	Gln		
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<213> Homo sapiens

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<400> 14123

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Lys	Gly	Gly	Glu	Lys	Ile	Gly	Ile	Ala	Glu	Phe	Ala	Ala	Ser	Leu	Glu
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Ser	Gly	Ser	Gly	Glu	Val	Asp	Leu	Arg	Glu	Cys	Val	Val	Ala	Leu	Ser
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180 185 190
Tyr Leu Tyr Pro Asp Gln Thr His Phe Glu Ser Cys Ala Glu Thr Ser
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<212> DNA
<213> Homo sapiens

<220>
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<211> 241

<212> PRT

<213> Homo sapiens

<400> 14125

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50 55 60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
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Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
85 90 95
Asp Leu Asp Pro Asn Asn Val Ile Ile Glu Gln Glu Glu Arg Arg Arg
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Arg Ser Phe Gln Asp Tyr Thr Gly Gln Lys Ile Thr Leu Glu Ala Val
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Leu Asn Thr Thr Cys Lys Lys Cys Gly Cys Lys Gly His Phe Ala Lys
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Asp Cys Phe Met Gln Pro Gly Gly Thr Lys Tyr Ser Leu Ile Pro Asp
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Glu Glu Glu Glu Lys Glu Glu Ala Lys Ser Ala Glu Phe Glu Lys Pro
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Asp Pro Thr Arg Asn Pro Ser Arg Lys Arg Lys Lys Glu Lys Lys Lys
180 185 190
Lys Lys His Arg Asp Arg Lys Ser Ser Asp Ser Asp Ser Ser Asp Ser
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<212> DNA
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<222> (263).. (1297)

<400> 14126

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Arg Ile Ser Leu Gln Asn Arg Arg Gln Glu Ile Ile Arg Gly Leu Arg
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Ser Leu Pro Glu Leu Ile Lys Glu Val Leu Ser Leu Glu Lys Ile
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His Asp Leu Ala Leu Glu Leu Tyr Thr Gln Arg Ser Leu Leu Val Met
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Gly Arg Gly Tyr Asn Tyr Ala Thr Cys Leu Glu Gly Ala Leu Lys Ile
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Val Ile Met Lys Asp Pro Cys Phe Ala Lys Cys Gln Asn Ala Leu Gln
595 600 605
Gln Val Thr Ala Arg Gln Gly Arg Pro Ile Ile Leu Cys Ser Lys Asp
610 615 620
Asp Thr Glu Ser Ser Lys Phe Ala Tyr Lys Thr Ile Glu Leu Pro His
625 630 635 640
Thr Val Asp Cys Leu Gln Gly Ile Leu Ser Val Ile Pro Leu Gln Leu
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Val Gln Ala Leu Leu Asp Ile Met Asp Met Phe Cys Asp Arg Leu Ser
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Cys His Gly Lys Ala Glu Glu Cys Ile Gly Leu Cys Arg Ala Leu Leu
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115 120 125
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Thr Ala Ile Glu His Ser Leu Leu Lys Leu Gly Glu Ile Leu Ala Asn
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 Cys Asn Lys Ile Ser Glu Met Ile Gln Gly Leu Ala Thr Pro Val Asp
 180 185 190
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 Ile Leu Ala Ser Ser Ala Arg Gln Leu Leu Gln Gln Leu Val Thr Ser
 210 215 220
 Tyr Pro Ser Thr Lys Met Val Ile Val Ser Leu His Thr Phe Thr Leu
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Gln	Thr	Val	Cys	Lys	Asn	Lys	Pro	Asn	Met	Ser	Asp	Pro	Glu	Glu	Ser	595	600	605	
Arg	Gly	Asn	Asp	Glu	Leu	Val	Lys	Gln	Glu	Met	Leu	Val	Gln	Tyr	Leu	610	615	620	
Gln	Asp	Ala	Tyr	Ser	Phe	Ser	Arg	Lys	Ile	Thr	Glu	Ala	Ile	Gly	Ile	625	630	635	640
Ile	Ser	Lys	Met	Met	Tyr	Glu	Asn	Thr	Thr	Thr	Val	Val	Gln	Glu	Val	645	650	655	
Ile	Glu	Phe	Phe	Val	Met	Val	Phe	Gln	Phe	Gly	Val	Pro	Gln	Ala	Leu	660	665	670	
Phe	Gly	Val	Arg	Arg	Met	Leu	Pro	Leu	Ile	Trp	Ser	Lys	Glu	Pro	Gly	675	680	685	
Val	Arg	Glu	Ala	Val	Leu	Asn	Ala	Tyr	Arg	Gln	Leu	Tyr	Leu	Asn	Pro	690	695	700	
Lys	Gly	Asp	Ser	Ala	Arg	Ala	Lys	Ala	Gln	Ala	Leu	Ile	Gln	Asn	Leu	705	710	715	720
Ser	Leu	Leu	Leu	Val	Asp	Ala	Ser	Val	Gly	Thr	Ile	Gln	Cys	Leu	Glu	725	730	735	
Glu	Ile	Leu	Cys	Glu	Phe	Val	Gln	Lys	Asp	Glu	Leu	Lys	Pro	Ala	Val	740	745	750	
Thr	Gln	Leu	Leu	Trp	Glu	Arg	Ala	Thr	Glu	Lys	Val	Ala	Cys	Cys	Pro	755	760	765	
Leu	Glu	Arg	Cys	Ser	Ser	Val	Met	Leu	Leu	Gly	Met	Met	Ala	Arg	Gly	770	775	780	
Lys	Pro	Glu	Ile	Val	Gly	Ser	Asn	Leu	Asp	Thr	Leu	Val	Ser	Ile	Gly	785	790	795	800
Leu	Asp	Glu	Lys	Phe	Pro	Gln	Asp	Tyr	Arg	Leu	Ala	Gln	Gln	Val	Cys	805	810	815	
His	Ala	Ile	Ala	Asn	Ile	Ser	Asp	Arg	Arg	Lys	Thr	Ser	Leu	Gly	Lys	820	825	830	
Arg	His	Pro	Pro	Phe	Arg	Leu	Pro	Gln	Glu	His	Arg	Leu	Phe	Glu	Arg	835	840	845	
Leu	Arg	Glu	Thr	Val	Thr	Lys	Gly	Phe	Val	His	Pro	Asp	Pro	Leu	Trp	850	855	860	
Ile	Pro	Phe	Lys	Glu	Val	Ala	Val	Thr	Leu	Ile	Tyr	Gln	Leu	Ala	Glu	865	870	875	880
Gly	Pro	Glu	Val	Ile	Cys	Ala	Gln	Ile	Leu	Gln	Gly	Cys	Ala	Lys	Gln	885	890	895	
Ala	Leu	Glu	Lys	Leu	Glu	Glu	Lys	Arg	Thr	Ser	Gln	Glu	Asp	Pro	Lys	900	905	910	
Glu	Ser	Pro	Ala	Met	Leu	Pro	Thr	Phe	Leu	Leu	Met	Asn	Leu	Leu	Ser	915	920	925	

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1300 1305 1310

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0962946.07300


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<212> PRT

<213> Homo sapiens

<400> 14142

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Arg Thr Tyr Arg Thr Met Asp Asp Lys Thr Val Phe His Glu Glu Phe
          35             40             45
Ile His Tyr Leu Lys Tyr Val Met Val Val Tyr Lys Arg Glu Pro Ala
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115 120 125
Met Pro Glu Asn Ala Gln Ile Asp Asp Asp Val Phe Asp Lys Ile Asn
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Lys Ala Met Leu Ile Arg Leu Lys Asp Lys Ile Pro Asn Val Arg Ile
145 150 155 160
Gln Ala Val Leu Ala Leu Ser Arg Leu Gln Asp Pro Lys Asp Asp Glu
165 170 175
Cys Pro Val Val Asn Ala Tyr Ala Thr Leu Ile Glu Asn Asp Ser Asn
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Pro Glu Val Arg Arg Ala Val Leu Ser Cys Ile Ala Pro Ser Ala Lys
195 200 205
Thr Leu Pro Lys Ile Val Gly Arg Thr Lys Asp Val Lys Glu Ala Val
210 215 220
Arg Lys Leu Ala Tyr Gln Val Leu Ala Glu Lys Val His Met Arg Ala
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Met Ser Ile Ala Gln Arg Val Met Leu Leu Gln Gln Gly Leu Asn Asp
245 250 255
Arg Ser Asp Ala Val Lys Gln Ala Met Gln Lys His Leu Leu Gln Gly
260 265 270
Trp Leu Arg Phe Ser Glu Gly Asn Ile Leu Glu Leu Leu His Arg Leu
275 280 285
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Phe Ser Ile Thr Pro Leu Ser Glu Leu Val Gly Leu Cys Lys Asn Asn
305 310 315 320
Asp Gly Arg Lys Leu Ile Pro Val Glu Thr Leu Thr Pro Glu Ile Ala
325 330 335
Leu Tyr Trp Cys Ala Leu Cys Glu Tyr Leu Lys Ser Lys Gly Asp Glu
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Gly Glu Glu Phe Leu Glu Gln Ile Leu Pro Glu Pro Val Val Tyr Ala
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Asp Tyr Leu Leu Ser Tyr Ile Gln Ser Ile Pro Val Val Asn Glu Glu
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Glu Gly Gly Arg Lys Lys Leu Leu Ala Val Leu Gln Glu Ile Leu Ile
420 425 430
Leu Pro Thr Ile Pro Ile Ser Leu Val Ser Phe Leu Val Glu Arg Leu
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Asp Pro Ala Asp Val Arg Lys Lys Glu Leu Lys Met Ala Glu Ile Lys
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Val Lys Leu Ile Glu Ala Lys Glu Ala Leu Glu Asn Cys Ile Thr Leu
500 505 510
Gln Asp Phe Asn Arg Ala Ser Glu Leu Lys Glu Glu Ile Lys Ala Leu
515 520 525
Glu Asp Ala Arg Ile Asn Leu Lys Glu Thr Glu Gln Leu Glu Ile
530 535 540
Lys Glu Val His Ile Glu Lys Asn Asp Ala Glu Thr Leu Gln Lys Cys
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Leu Ile Leu Cys Tyr Glu Leu Leu Lys Gln Met Ser Ile Ser Thr Gly
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580 585 590
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610 615 620
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Phe Lys Thr Lys Lys Ile Lys Thr Leu His Cys Glu Gly Thr Glu Ile
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675 680 685
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Ser Glu Leu Arg Thr Gly Ala Ala Glu Gly Leu Ala Lys Leu Met Phe
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785 790 795 800
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835 840 845

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-7846/13211-

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865					870					875					880
Arg	Thr	Cys	Leu	Arg	Ala	Leu	Glu	Lys	Ile	Lys	Ile	Gln	Leu	Glu	Lys
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Gly	Asn	Lys	Glu	Phe	Gly	Asp	Gln	Ala	Glu	Ala	Ala	Gln	Asp	Ala	Thr
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Leu	Thr	Thr	Thr	Thr	Phe	Gln	Asn	Glu	Asp	Glu	Lys	Asn	Lys	Glu	Val
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Tyr	Met	Thr	Pro	Leu	Arg	Gly	Val	Lys	Ala	Thr	Gln	Ala	Ser	Lys	Ser
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Thr	Gln	Leu	Lys	Thr	Asn	Arg	Gly	Gln	Arg	Lys	Val	Thr	Val	Ser	Ala
945					950					955					960
Arg	Thr	Asn	Arg	Arg	Cys	Gln	Thr	Ala	Glu	Ala	Asp	Ser	Glu	Ser	Asp
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His	Glu	Val	Pro	Glu	Pro	Glu	Ser	Glu	Met	Lys	Met	Arg	Leu	Pro	Arg
		980						985					990		
Arg	Ala	Lys	Thr	Ala	Ala	Leu	Glu	Lys	Ser	Lys	Leu	Asn	Leu	Ala	Gln
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Ala Val Ala Val Asp Cys Lys Asp Pro Asp Asp Val Val Pro Val Gly
          35          40          45
Gln Arg Arg Ala Trp Cys Trp Cys Met Cys Phe Gly Leu Ala Phe Met
          50          55          60
Leu Ala Gly Val Ile Leu Gly Gly Ala Tyr Leu Tyr Lys Tyr Phe Ala
          65          70          75          80
Leu Gln Pro Asp Asp Val Tyr Tyr Cys Gly Ile Lys Tyr Ile Lys Asp
          85          90          95
Asp Val Ile Leu Asn Glu Pro Ser Ala Asp Ala Pro Ala Ala Leu Tyr
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Gln Thr Ile Glu Glu Asn Ile Lys Ile Phe Glu Lys Lys Lys Leu Asn
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Leu Ser Val Cys Leu Ser Gln Ser Leu Gln Ile Val Ile Leu Pro Thr
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gccactgaca gcaacaagca gaacctgcgg cagtactttg aagaggcttt tgagttcatt 480
gaggaagctc accagtgtgg gaaggggctt ctcatccact gccaggctgg ggtgtcccgc 540
tccgccacca tcgtcatcgc ttacttgatg aagcacactc ggatgaccat gactgatgct 600
tataaatttg tcaaaggcaa acgaccaatt atctcccaa accttaactt catggggcag 660
ttgctagagt tcgaggaaga cctaaacaac ggtgtgacac cgagaatcct tacaccaaag 720
ctgatgggcg tggagacggt tgtgtgacaa tggctggtat ggaaaggatt gctgctctcc 780
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<210> 14147
<211> 140
<212> PRT
<213> Homo sapiens

<400> 14147
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Pro Leu Tyr His Tyr Glu Lys Gly Leu Phe Asn Tyr Lys Arg Leu Pro

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	35						40					45			
Phe	Glu	Phe	Ile	Glu	Glu	Ala	His	Gln	Cys	Gly	Lys	Gly	Leu	Leu	Ile
	50					55					60				
His	Cys	Gln	Ala	Gly	Val	Ser	Arg	Ser	Ala	Thr	Ile	Val	Ile	Ala	Tyr
65					70					75					80
Leu	Met	Lys	His	Thr	Arg	Met	Thr	Met	Thr	Asp	Ala	Tyr	Lys	Phe	Val
				85					90					95	
Lys	Gly	Lys	Arg	Pro	Ile	Ile	Ser	Pro	Asn	Leu	Asn	Phe	Met	Gly	Gln
			100					105					110		
Leu	Leu	Glu	Phe	Glu	Glu	Asp	Leu	Asn	Asn	Gly	Val	Thr	Pro	Arg	Ile
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<211> 966
<212> DNA
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<220>
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<222> (133).. (822)

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<210> 14149
<211> 230

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<212> PRT

<213> Homo sapiens

<400> 14149

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His Gln Asp Asp Phe Phe Lys Pro Gln Asp Gln Ile Ala Val Gly Glu
35 40 45
Asp Gly Phe Lys Gln Trp Asp Val Leu Glu Ser Leu Asp Met Glu Ala
50 55 60
Met Leu Asp Thr Val Gln Ala Trp Leu Ser Ser Pro Gln Lys Phe Ala
65 70 75 80
Arg Ala His Gly Val Ser Val Gln Pro Glu Ala Ser Asp Thr His Ile
85 90 95
Leu Leu Leu Glu Gly Phe Leu Leu Tyr Ser Tyr Lys Pro Leu Val Asp
100 105 110
Leu Tyr Ser Arg Arg Tyr Phe Leu Thr Val Pro Tyr Glu Glu Cys Lys
115 120 125
Trp Arg Arg Ser Thr Arg Asn Tyr Thr Val Pro Asp Pro Pro Gly Leu
130 135 140
Phe Asp Gly His Val Trp Pro Met Tyr Gln Lys Tyr Arg Gln Glu Met
145 150 155 160
Glu Ala Asn Gly Val Glu Val Val Tyr Leu Asp Gly Met Lys Ser Arg
165 170 175
Glu Glu Leu Phe Arg Glu Val Leu Glu Asp Ile Gln Asn Ser Leu Leu
180 185 190
Asn Arg Ser Gln Glu Ser Ala Pro Ser Pro Ala Arg Pro Ala Arg Thr
195 200 205
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Ser Gln Gln Asp Ser Met
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<210> 14150

<211> 3237

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (76).. (2712)

<400> 14150

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<210> 14151

<211> 879

<212> PRT

<213> Homo sapiens

<400> 14151

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Gln	Glu	Leu	Asn	Ala	Arg	Glu	Glu	Gln	Asp	Ile	Glu	Ile	Met	Met	Glu	
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Gly	Cys	Glu	Tyr	Ala	Ile	Ser	Asn	Ala	Glu	Ala	Phe	Ala	Glu	Lys	Leu	
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Ser	Arg	Glu	Leu	Gln	Val	Leu	Asp	Gly	Ala	Asn	Ile	Gln	Ser	Ile	Met	
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Leu	Lys	Glu	Val	Asp	Gln	Ile	Glu	Leu	Lys	Leu	Ser	Ser	Tyr	Glu	Glu	
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			245						250					255		
His	Leu	Ile	His	Leu	Ser	Asn	Thr	Asn	Asn	Val	Lys	Leu	Leu	Ser	Glu	
		260					265						270			
Ile	Glu	Phe	Leu	Val	Asn	His	Met	Asp	Leu	Ala	Lys	Gly	His	Ile	Lys	
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Pro	Gly	His	Asp	Leu	Leu	Leu	Ala	Val	Lys	Gln	Gln	Gln	Gln	Arg	Phe
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Ser	Asp	Leu	Arg	Glu	Leu	Phe	Ala	Arg	Arg	Leu	Ala	Ser	His	Leu	Asn
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Asn	Val	Phe	Val	Gln	Gln	Gly	His	Asp	Gln	Ser	Ser	Thr	Leu	Ala	Gln
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Pro	Glu	Leu	Asn	Asn	Leu	Ile	Ala	Leu	Gly	Asp	Lys	Ile	Asp	Ser	Phe
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Asn	Ser	Leu	Tyr	Met	Leu	Val	Lys	Met	Ser	His	His	Val	Trp	Thr	Ala
		595					600					605			
Gln	Asn	Val	Asp	Pro	Ala	Ser	Phe	Leu	Ser	Thr	Thr	Leu	Gly	Asn	Val
	610					615					620				
Leu	Val	Thr	Val	Lys	Arg	Asn	Phe	Asp	Lys	Cys	Ile	Ser	Asn	Gln	Ile
625					630					635					640
Arg	Gln	Met	Glu	Glu	Val	Lys	Ile	Ser	Lys	Lys	Ser	Lys	Val	Gly	Ile
			645						650					655	
Leu	Pro	Phe	Val	Ala	Glu	Phe	Glu	Glu	Phe	Ala	Gly	Leu	Ala	Glu	Ser
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Ile	Phe	Lys	Asn	Ala	Glu	Arg	Arg	Gly	Asp	Leu	Asp	Lys	Ala	Tyr	Thr
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Lys	Leu	Ile	Arg	Gly	Val	Phe	Val	Asn	Val	Glu	Lys	Val	Ala	Asn	Glu
	690					695					700				
Ser	Gln	Lys	Thr	Pro	Arg	Asp	Val	Val	Met	Met	Glu	Asn	Phe	His	His
705					710					715					720
Ile	Phe	Ala	Thr	Leu	Ser	Arg	Leu	Lys	Ile	Ser	Cys	Leu	Glu	Ala	Glu
				725					730						735
Lys	Lys	Glu	Ala	Lys	Gln	Lys	Tyr	Thr	Asp	His	Leu	Gln	Ser	Tyr	Val
			740					745						750	
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	755						760					765			
Gly	Val	Glu	Ala	Arg	Val	Ala	Gln	Gly	Ile	Arg	Glu	Glu	Glu	Val	Ser
	770					775					780				
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785					790					795					800
Tyr	Pro	Gly	Lys	Glu	Val	Lys	Lys	Gly	Leu	Asp	Asn	Leu	Tyr	Lys	Lys
			805						810					815	
Val	Asp	Lys	His	Leu	Cys	Glu	Glu	Glu	Asn	Leu	Leu	Gln	Val	Val	Trp
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His	Ser	Met	Gln	Asp	Glu	Phe	Ile	Arg	Gln	Tyr	Lys	His	Phe	Glu	Gly
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 <213> Homo sapiens

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 tgggtggccga gctggagaag acgttgagcg gctgccccgc cgtggactcc gtggtcagcc 240
 tgctggacgg cgtggtggag aagctcagcg tcctcaagag gaaggcgggtg gaatccatcc 300
 aggccgagga cgagagcgcc aagctgtgca agcgccgat cgagcacctc aaagagcata 360
 gcagcgacca gcccgcgcg gccagcgtgt ggaagaggaa gcgcatggat cgcacatgatg 420
 tggagcacct gctgcgttgc ggctactaca acacggctgt caagctggcg cgccagagcg 480
 gcatcgggac atgcaagaag gcacttcagc caagcagaag ggagccagct ggacgaggtg 540
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atcaagacac ctgctacaag gaggacggca gctccaagag ccctgactgc cctgtgtgca 780
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tggtctgcaa gatttctggc gacgtgatga acgagaacaa tccgcccattg atgtgtccca 900
acggctacgt ctacggctac aattctctgc tttctatccg tcaagatgat aaagtcgtgt 960
gcccagagaac caaagaagtc ttccacttct cacaagccga gaagggtgtac atcatgtagg 1020
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cattacagaa attaatcgtt cagttgaaag aagtactgat gacttttcaa aacaaatgaa 1860
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 <212> PRT
 <213> Homo sapiens

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Phe Arg Ala Ala Gln Lys Asn Ile Asp Arg Glu Thr Ser His Val Thr
      35             40             45
Met Val Val Ala Glu Leu Glu Lys Thr Leu Ser Gly Cys Pro Ala Val
      50             55             60
Asp Ser Val Val Ser Leu Leu Asp Gly Val Val Glu Lys Leu Ser Val
      65             70             75             80
Leu Lys Arg Lys Ala Val Glu Ser Ile Gln Ala Glu Asp Glu Ser Ala
      85             90             95
Lys Leu Cys Lys Arg Arg Ile Glu His Leu Lys Glu His Ser Ser Asp
      100            105            110
Gln Pro Ala Ala Ala Ser Val Trp Lys Arg Lys Arg Met Asp Arg Met
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Met Val Glu His Leu Leu Arg Cys Gly Tyr Tyr Asn Thr Ala Val Lys

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Ser	Arg	Arg	Glu	Pro	Ala	Gly	Arg	Gly	Ala	Pro	Gly	His	Gly	His	Ala
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Gly	Leu	Pro	Ala	Arg	His	Ala	His	Leu	Pro	Val	Gln	Gly	Pro	Ser	Gly
			180					185					190		
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		195					200					205			
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	210					215					220				
Gly	Trp	Pro	Leu	Ser	His	Gln	Asp	Thr	Cys	Tyr	Lys	Glu	Asp	Gly	Ser
225					230					235					240
Ser	Lys	Ser	Pro	Asp	Cys	Pro	Val	Cys	Ser	Arg	Ser	Leu	Asn	Lys	Leu
			245						250				255		
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		260						265					270		
Lys	Ile	Ser	Gly	Asp	Val	Met	Asn	Glu	Asn	Asn	Pro	Pro	Met	Met	Leu
	275					280					285				
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 <212> DNA
 <213> Homo sapiens

<220>
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 aaaactgtta acctcttacg gatttattca gtgttcagaa cgtcaagcta gacttttctt 180
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 tgataacaat aaacatactg gtgctgtaag tgctcgcaac attatgctgt tgaaaaagaa 480
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 aggtgatgtt gtaaaagaga tattctttca ctatagttaa tttaagggtg acttagaaac 600
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catcaagtgt	gtggatcgtg	atgttcgtat	gttcttccac	ttcagtgaag	ttctggatgg	1080
gaaccagctc	catattgcag	atgaagtaga	gtttactgtg	gttctgata	tgctctctgc	1140
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<211> 767

<212> PRT

<213> Homo sapiens

<400> 14155

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Leu	Leu	Thr	Ser	Tyr	Gly	Phe	Ile	Gln	Cys	Ser	Glu	Arg	Gln	Ala	Arg
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Leu	Phe	Phe	His	Cys	Ser	Gln	Tyr	Asn	Gly	Asn	Leu	Gln	Asp	Leu	Lys
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Lys	Pro	Ile	Ala	Val	Lys	Leu	Val	Lys	Ile	Lys	Gln	Glu	Ile	Leu	Pro
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Glu	Glu	Arg	Met	Asn	Gly	Gln	Glu	Val	Phe	Tyr	Leu	Thr	Tyr	Thr	Pro
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Glu	Asp	Val	Glu	Gly	Asn	Val	Gln	Leu	Glu	Thr	Gly	Asp	Lys	Ile	Asn
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Phe	Val	Ile	Asp	Asn	Asn	Lys	His	Thr	Gly	Ala	Val	Ser	Ala	Arg	Asn
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Ala	Met	Lys	Glu	Ala	Phe	Gly	Phe	Ile	Glu	Arg	Gly	Asp	Val	Val	Lys
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Lys	Val	Asp	Phe	Val	Ile	Pro	Lys	Glu	Leu	Pro	Phe	Gly	Asp	Lys	Asp
			260					265					270		
Thr	Lys	Ser	Lys	Val	Thr	Leu	Leu	Glu	Gly	Asp	His	Val	Arg	Phe	Asn
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Ile	Ser	Thr	Asp	Arg	Arg	Asp	Lys	Leu	Glu	Arg	Ala	Thr	Asn	Ile	Glu
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Val	Leu	Ser	Asn	Thr	Phe	Gln	Phe	Thr	Asn	Glu	Ala	Arg	Glu	Met	Gly
305					310					315					320
Val	Ile	Ala	Ala	Met	Arg	Asp	Gly	Phe	Gly	Phe	Ile	Lys	Cys	Val	Asp
				325					330					335	
Arg	Asp	Val	Arg	Met	Phe	Phe	His	Phe	Ser	Glu	Ile	Leu	Asp	Gly	Asn
			340					345					350		
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Val	Glu	Lys	Glu	Ala	Thr	Phe	Ser	Asn	Pro	Lys	Thr	Thr	Ser	Pro	Asn		
				405					410					415			
Lys	Gly	Lys	Glu	Lys	Glu	Ala	Glu	Asp	Gly	Ile	Ile	Ala	Tyr	Asp	Asp		
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Cys	Gly	Val	Lys	Leu	Thr	Ile	Ala	Phe	Gln	Ala	Lys	Asp	Val	Glu	Gly		
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Lys	Gln	Arg	Pro	Gly	Gln	Gln	Val	Ala	Thr	Cys	Val	Arg	Leu	Leu	Gly		
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Asp	Met	Val	Glu	Tyr	Ser	Leu	Ser	Lys	Gly	Lys	Gly	Asn	Lys	Val	Ser		
	530					535					540						
Ala	Glu	Lys	Val	Asn	Lys	Thr	His	Ser	Val	Asn	Gly	Ile	Thr	Glu	Glu		
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Glu	Gly	Asp	Met	Lys	Gly	Glu	Val	Tyr	Pro	Phe	Gly	Ile	Val	Gly	Met		
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Ala	Asn	Lys	Gly	Asp	Cys	Leu	Gln	Lys	Gly	Glu	Ser	Val	Lys	Phe	Gln		
	610					615					620						
Leu	Cys	Val	Leu	Gly	Gln	Asn	Ala	Gln	Thr	Met	Ala	Tyr	Asn	Ile	Thr		
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				645					650					655			
Ile	Asn	Tyr	Glu	Val	Gly	Asp	Ser	Lys	Lys	Leu	Phe	Phe	His	Val	Lys		
		660						665					670				
Glu	Val	Gln	Asp	Gly	Ile	Glu	Leu	Gln	Ala	Gly	Asp	Glu	Val	Glu	Phe		
	675						680					685					
Ser	Val	Ile	Leu	Asn	Gln	Arg	Thr	Gly	Lys	Cys	Ser	Ala	Cys	Asn	Val		
	690					695					700						
Trp	Arg	Val	Cys	Glu	Gly	Pro	Lys	Ala	Val	Ala	Ala	Pro	Arg	Pro	Asp		
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<212> DNA
<213> Homo sapiens

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<211> 525

<212> PRT

<213> Homo sapiens

<400> 14157

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Tyr Arg His Arg Pro Glu Arg Ala Pro Pro Gln Ala Ala Pro Asn Ser
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Ala Leu Ile Pro Thr Asp Pro Ala Ala Glu Gly Gln Leu Leu Ser Gln
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Thr Ser Ala Thr Asp Val Arg Pro Leu Ser Thr Arg Asp Ser Thr Pro
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Ile Gln Thr Arg Thr Cys Cys Cys Val Ile Ser Val Arg Gly Leu Ala
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Gln Ala Gln Arg Leu Ile Arg Met Tyr Ser Gly Arg Arg Trp Leu Asp
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Ser His Gly Thr Trp Leu Pro Gly Arg Cys Leu Ile Arg Arg Leu Arg
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145 150 155 160
Lys Glu Leu Gln Ser Trp Lys Ala Glu Asn Glu Ala Phe Thr Leu Ala
165 170 175
Asp Leu Lys Gln Leu Pro Glu Leu Asn Pro Pro Val Leu Met Pro Arg
180 185 190
Gly Asn Val Gly Thr Pro Leu Arg Val Phe Leu Glu Leu Ile Arg Ala
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Cys Arg Leu Pro Pro Arg Ile Ile Thr Gln Leu Gln Leu Gln Phe Pro
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Lys Thr Gly Ser Ser Arg Arg Tyr Gly Asn Val Pro Phe Glu Tyr Glu
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Asp Ser Glu Thr Val Glu Gln Glu Glu Leu Val Cys Thr Ala Glu Gly
245 250 255
Glu Glu Ile Pro Gln Gly Thr Tyr Leu Ala Asp Ile Pro Ala Ser Pro
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Cys Gly Glu Pro Glu Glu Glu Val Gly Lys Glu Glu Glu Glu Glu Ser
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His Ser Asp Glu Asp Asp Asp Arg Gly Glu Glu Trp Glu Arg His Glu

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Val Phe Tyr Thr Asp Ala Gln Phe Trp Gln Glu Glu Glu Gly Asp Phe				
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Asp Glu Gln Thr Ala Asp Asp Trp Asp Val Asp Met Ser Val Tyr Tyr				
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Asp Arg Asp Gly Gly Asp Lys Asp Ala Arg Asp Ser Val Gln Met Arg				
	370		375	380
Leu Glu Gln Arg Leu Arg Asp Gly Gln Glu Asp Gly Ser Val Ile Glu				
385		390		395
Arg Gln Val Gly Thr Phe Glu Arg His Thr Lys Gly Ile Gly Arg Lys				
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Val Met Glu Arg Gln Gly Trp Ala Glu Gly Gln Gly Leu Gly Cys Arg				
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Cys Ser Gly Val Pro Glu Ala Leu Asp Ser Asp Gly Gln His Pro Arg				
	435		440	445
Cys Lys Arg Gly Leu Gly Tyr His Gly Glu Lys Leu Gln Pro Phe Gly				
	450		455	460
Gln Leu Lys Arg Pro Arg Arg Asn Gly Leu Gly Leu Ile Ser Thr Ile				
465		470		475
Tyr Asp Glu Pro Leu Pro Gln Asp Gln Thr Glu Ser Leu Leu Arg Arg				
	485		490	495
Gln Pro Pro Thr Ser Met Lys Phe Arg Thr Asp Met Ala Phe Val Arg				
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 <212> DNA
 <213> Homo sapiens

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 <222> (23).. (1270)

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<211> 416
<212> PRT
<213> Homo sapiens

<400> 14159
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35 40 45
Ile Trp Thr Ala His Tyr Asp Pro Gly His Cys Phe Ala Glu Ser Arg
50 55 60
Glu Leu Pro Val Arg Cys Ala Gly Asp Trp Leu Pro Arg Gly Leu Gly
65 70 75 80
Trp Gly Gly Arg Gly Ala Ala Val Cys Ala Tyr Val Arg Met Val Phe
85 90 95
Leu Ala Leu Tyr Val Leu Phe Leu Ala Asp Glu Glu Phe Asp Val Val
100 105 110
Val Cys Asp Gln Val Ser Ala Cys Ile Pro Val Phe Arg Leu Ala Arg
115 120 125

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Arg Arg Lys Lys Ile Leu Phe Tyr Cys His Phe Pro Asp Leu Leu Leu
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Thr Lys Arg Asp Ser Phe Leu Lys Arg Leu Tyr Arg Ala Pro Ile Asp
145 150 155 160
Trp Ile Glu Glu Tyr Thr Thr Gly Met Ala Asp Cys Ile Leu Val Asn
165 170 175
Ser Gln Phe Thr Ala Ala Val Phe Lys Glu Thr Phe Lys Ser Leu Ser
180 185 190
His Ile Asp Pro Asp Val Leu Tyr Pro Ser Leu Asn Val Thr Ser Phe
195 200 205
Asp Ser Val Val Pro Glu Lys Leu Asp Asp Leu Val Pro Lys Gly Lys
210 215 220
Lys Phe Leu Leu Leu Ser Ile Asn Arg Tyr Glu Arg Lys Lys Asn Leu
225 230 235 240
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245 250 255
Gln Asp Trp Glu Arg Val His Leu Ile Val Ala Gly Gly Tyr Asp Glu
260 265 270
Arg Val Leu Glu Asn Val Glu His Tyr Gln Glu Leu Lys Lys Met Val
275 280 285
Gln Gln Ser Asp Leu Gly Gln Tyr Val Thr Phe Leu Arg Ser Phe Ser
290 295 300
Asp Lys Gln Lys Ile Ser Leu Leu His Ser Cys Thr Cys Val Leu Tyr
305 310 315 320
Thr Pro Ser Asn Glu His Phe Gly Ile Val Pro Leu Glu Ala Met Tyr
325 330 335
Met Gln Cys Pro Val Ile Ala Val Asn Ser Gly Gly Pro Leu Glu Ser
340 345 350
Ile Asp His Ser Val Thr Gly Phe Leu Cys Glu Pro Asp Pro Val His
355 360 365
Phe Ser Glu Ala Ile Glu Lys Phe Ile Arg Glu Pro Ser Leu Lys Ala
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<211> 966
<212> DNA
<213> Homo sapiens

<220>
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<222> (37).. (771)

<400> 14160

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 <211> 245
 <212> PRT
 <213> Homo sapiens

<400> 14161

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Thr	Glu	Arg	Asp	Lys	Asn	Gln	Ser	Ser	Ser	Lys	Arg	Lys	Ala	Val	Val
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Pro	Gly	Pro	Ala	Glu	His	Pro	Leu	Gln	Tyr	Asn	Tyr	Thr	Phe	Trp	Tyr
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Ser	Arg	Arg	Thr	Pro	Gly	Arg	Pro	Thr	Ser	Ser	Gln	Ser	Tyr	Glu	Gln
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Phe	Tyr	Ser	His	Met	Val	Arg	Pro	Gly	Asp	Leu	Thr	Gly	His	Ser	Asp
			100					105					110		
Phe	His	Leu	Phe	Lys	Glu	Gly	Ile	Lys	Pro	Met	Trp	Glu	Asp	Asp	Ala
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Asn	Lys	Asn	Gly	Gly	Lys	Trp	Ile	Ile	Arg	Leu	Arg	Lys	Gly	Leu	Ala
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Ser	Arg	Cys	Trp	Glu	Asn	Leu	Ile	Leu	Ala	Met	Leu	Gly	Glu	Gln	Phe
	145				150					155				160	
Met	Val	Gly	Glu	Glu	Ile	Cys	Gly	Ala	Val	Val	Ser	Val	Arg	Phe	Gln
			165						170					175	
Glu	Asp	Ile	Ile	Ser	Ile	Trp	Asn	Lys	Thr	Ala	Ser	Asp	Gln	Ala	Thr

	180		185		190										
Thr	Ala	Arg	Ile	Arg	Asp	Thr	Leu	Arg	Arg	Val	Leu	Asn	Leu	Pro	Pro
	195		200		205										
Asn	Thr	Ile	Met	Glu	Tyr	Lys	Thr	His	Thr	Asp	Ser	Ile	Lys	Met	Pro
210						215					220				
Gly	Arg	Leu	Gly	Pro	Gln	Arg	Leu	Leu	Phe	Gln	Asn	Leu	Trp	Lys	Pro
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Arg	Leu	Asn	Val	Pro											
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<210> 14162
 <211> 3459
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (76).. (702)

<400> 14162

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<210> 14163
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 14163
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 Asp Glu Pro Gln Leu Leu His Gly Ala Gly Ile Cys Lys Trp Phe Asn
 35 40 45
 Val Arg Met Gly Phe Gly Phe Leu Ser Met Thr Ala Arg Ala Gly Val
 50 55 60
 Ala Leu Asp Pro Pro Val Asp Val Phe Val His Gln Ser Lys Leu His

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- <211> 856
- <212> PRT
- <213> Homo sapiens

<400> 14170

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Gln	Lys	Ala	Tyr	Glu	Ser	Lys	Ile	Asp	Tyr	Asp	Lys	Ile	Val	Tyr	Tyr
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Pro	Glu	Leu	Arg	Gln	Leu	Pro	Pro	Val	Asp	Ala	Glu	Leu	Asp	Asn	Val
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Ser	Val	Tyr	Val	Asn	Asn	Thr	Glu	Ser	Tyr	Ile	His	Arg	Asn	Leu	Pro
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Cys	Gly	Val	Cys	Gly	Tyr	Asp	Arg	His	Ala	Thr	Pro	Thr	Thr	Arg	Gly
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Cys	Val	Ser	Asn	Thr	Gly	Gly	Val	Phe	Leu	Met	Val	Gly	Val	Gly	Leu
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Ser	Phe	Leu	Phe	Cys	Trp	Ile	Leu	Met	Ile	Ile	Val	Val	Leu	Thr	Phe
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Val	Phe	Gly	Ala	Asn	Val	Glu	Lys	Leu	Ile	Cys	Glu	Pro	Tyr	Thr	Ser
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Phe	Ala	Tyr	Asp	Leu	Glu	Ala	Lys	Ala	Asn	Ser	Leu	Pro	Pro	Gly	Asn
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Leu	Arg	Asn	Ser	Leu	Lys	Arg	Asp	Ala	Gln	Thr	Ile	Lys	Thr	Ile	His
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Gln	Gln	Arg	Val	Leu	Pro	Ile	Glu	Gln	Ser	Leu	Ser	Thr	Leu	Tyr	Gln
		675					680					685			
Ser	Val	Lys	Ile	Leu	Gln	Arg	Thr	Gly	Asn	Gly	Leu	Leu	Glu	Arg	Val
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Thr	Arg	Ile	Leu	Ala	Ser	Leu	Asp	Tyr	Ala	Gln	Asn	Phe	Ile	Thr	Asn
705					710					715					720
Asn	Thr	Ser	Ser	Val	Ile	Ile	Glu	Glu	Thr	Lys	Lys	Tyr	Gly	Arg	Thr
				725					730					735	
Ile	Ile	Gly	Tyr	Phe	Glu	His	Tyr	Leu	Gln	Trp	Ile	Glu	Phe	Ser	Ile
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755 760 765
Ala Val Asp Val Phe Leu Cys Ser Tyr Ile Ile Asp Pro Leu Asn Leu
770 775 780
Phe Trp Phe Gly Ile Gly Lys Ala Thr Val Phe Leu Leu Pro Ala Leu
785 790 795 800
Ile Phe Ala Val Lys Leu Ala Lys Tyr Tyr Arg Arg Met Asp Ser Glu
805 810 815
Asp Val Tyr Asp Asp Val Glu Thr Ile Pro Met Lys Asn Met Glu Asn
820 825 830
Gly Asn Asn Gly Tyr His Lys Asp His Val Tyr Gly Ile His Asn Pro
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Val Met Thr Ser Pro Ser Gln His
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<212> PRT

<213> Homo sapiens

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35 40 45
Leu Val Ala Ala Gly Ser Tyr Gln Arg Phe Thr Asp Cys Tyr Lys Cys
50 55 60
Phe Tyr Gln Leu Gln Pro Ala Met Thr Gln Gln Ile Tyr Asp Lys Phe
65 70 75 80
Ile Ala Gln Leu Gln Thr Ser Ile Arg Glu Glu Ile Ser Asp Ile Lys
85 90 95
Glu Glu Gly Asn Leu Glu Ala Val Leu Asn Ala Leu Asp Lys Ile Val
100 105 110
Glu Glu Gly Lys Val Arg Lys Glu Gln Pro Gly Ala Pro Ala Gly Ser
115 120 125
Gln Arg Arg Ile Cys Thr Val Leu Trp His Pro Thr Ser Cys Ser Asn
130 135 140
Gly Thr Pro Cys Gly Ala Met Cys Arg Asn Arg Arg Pro Arg Thr Ser
145 150 155 160
Ser Trp Gln Met Pro Ser Trp Gln Gly Gly Gly Arg Trp Arg Ser Cys
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Asn Arg Gly Ser Trp Leu Leu Cys
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<211> 1292

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (89).. (598)

<400> 14173

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<213> Homo sapiens

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 <213> Homo sapiens

<400> 14176

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Gly	Arg	Leu	Leu	Val	Tyr	Asp	Thr	Ser	Asp	Gly	Thr	Leu	Leu	Gln	Pro
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		50				55				60					
Gly	Lys	Arg	Phe	Ala	Ser	Gly	Ser	Ala	Asp	Lys	Ser	Val	Ile	Ile	Trp
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Thr	Ser	Lys	Leu	Glu	Gly	Ile	Leu	Lys	Tyr	Thr	His	Asn	Asp	Ala	Ile
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Gln	Cys	Val	Ser	Tyr	Asn	Pro	Ile	Thr	His	Gln	Leu	Ala	Ser	Cys	Ser
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Cys	Ser	Pro	Val	Pro	Gly	Leu	Ser	Ser	Ser	Pro	Ser	Gly	Ser	Pro	Leu
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Gly Gln Glu Glu Cys Ala Lys Trp Leu Leu Leu Asn Asn Ala Asn Pro
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000270" 69462960

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Glu Leu Val Ser Ala Asp Val Ile Asp Leu Phe Asp Glu Gln Gly Leu				
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Ser Ala Leu His Leu Ala Ala Gln Gly Arg His Ala Gln Thr Val Glu				
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Thr Leu Leu Arg His Gly Ala His Ile Asn Leu Gln Ser Leu Lys Phe				
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00929469.072800

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 <212> PRT
 <213> Homo sapiens

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405

410

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<212> DNA
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<220>
<221> CDS
<222> (137).. (877)

<400> 14192

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<210> 14193
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 <213> Homo sapiens

<400> 14193

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65					70					75				80	
Val	Arg	Leu	Arg	Pro	Gly	His	Met	Asn	Val	Val	Leu	Ile	Leu	Ser	Asn
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Ser	Thr	Lys	Thr	Ser	Leu	Leu	Gln	Lys	Phe	Ala	Leu	Glu	Val	Tyr	Thr

-7911/13211-

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	130		135		140
Pro Ile Pro Asn Gln Tyr Asp Lys His Phe Met Glu Arg Asp Tyr Thr					
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Gly Tyr Val Leu Ala Leu Asn Gly His Lys Lys Tyr Phe Cys Leu Phe					
	165		170		175
Lys Pro Gln Lys Thr Val Glu Glu Glu Ala Ile Gly Ser Cys Ser					
	180		185		190
Asp Val Asp Ser Ser Leu Tyr Leu Gly Glu Ser Arg Gly Lys Pro Ser					
	195		200		205
Cys Gly Leu Gly Ser Arg Pro Ile Lys Gly Lys Leu Ser Lys Leu Ser					
210		215		220	
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Arg Asp Phe Leu Leu Ala Leu Glu Arg Gln Gly Arg Cys Asp Glu Ser
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Val Pro Pro His Tyr Pro Val Val Cys Cys Pro Thr Ser Gly Pro Gln
145 150 155 160
Met Cys Ser Lys Arg Pro Ala Arg Gly Arg Ala Thr Leu Gly Ser Gln
165 170 175
Arg Lys Arg Arg Lys Pro Val Thr Pro Asp Pro Lys Glu Lys Gln Thr
180 185 190
Cys Asp Ile Arg Leu Arg Val Arg Ala Glu Tyr Cys Gln His Glu Thr
195 200 205

09629469-072800

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<211> 444

<212> PRT

<213> Homo sapiens

<400> 14197

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Thr	Arg	Arg	His	Pro	Gly	Gly	Ser	Arg	Val	Ile	Ser	His	Tyr	Ala	Gly
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 Trp Ser Gln Phe Asp Glu Asn Ile Arg Ile Ile Leu Lys Arg Tyr Asp
 100 105 110
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 115 120 125
 Val Pro Glu Pro Glu Pro Asp Ser Asp Ser Asn Gln Glu Arg Lys Asp
 130 135 140
 Asp Arg Glu Arg Gly Glu Gly Gln Glu Pro Ala Phe Ser Phe Leu Ala
 145 150 155 160
 Thr Leu Ala Ser Ser Ser Ser Glu Glu Met Glu Ser Gln Leu Gln Glu
 165 170 175
 Arg Val Glu Ser Ser Arg Arg Ala Val Ser Gln Ile Val Thr Val Tyr
 180 185 190
 Asp Lys Leu Gln Glu Lys Val Glu Leu Leu Ser Arg Lys Leu Asn Ser
 195 200 205
 Gly Asp Asn Leu Ile Val Glu Glu Ala Val Gln Glu Leu Asn Ser Phe
 210 215 220
 Leu Ala Gln Glu Asn Met Arg Leu Gln Glu Leu Thr Asp Leu Leu Gln
 225 230 235 240
 Glu Lys His Arg Thr Met Ser Gln Glu Phe Ser Lys Leu Gln Ser Lys
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Lys	Val	Tyr	Gly	Ala	Gly	Ser	Ser	Leu	Tyr	Gly	Gly	Thr	Ile	Thr	Ile	
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Ser	Ala	Val	Glu	Gln	Val	Val	Lys	Glu	Thr	Pro	Glu	Tyr	Arg	Cys	Met	
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Tyr	Lys	Arg	Lys	Leu	Arg	Glu	Ala	Gln	Ser	Asp	Leu	Asn	Lys	Thr	Arg	
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Leu	Arg	Ser	Gly	Ser	Ala	Leu	Leu	Gln	Ser	Gln	Ser	Ser	Thr	Glu	Asp	
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Lys	Ser	Lys	Arg	Asp	Glu	Glu	Glu	Arg	Glu	Arg	Glu	Arg	Arg	Glu	Lys	
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Lys	Glu	Met	Lys	Leu	Leu	Leu	Asp	Met	Tyr	Arg	Ser	Ala	Pro	Lys	Glu	

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	770					775					780					
Ala	Asp	Gln	Val	Leu	Thr	Leu	Lys	Thr	Gln	Val	Asp	Ala	Gln	Leu	Gln	
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Phe Gln Glu Leu Ile Lys Gly Lys Glu Asp Asp Ser Phe Leu Arg Asn
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Tyr Tyr Tyr Val Gly Phe Ala Tyr Leu Met Met Arg Arg Tyr Gln Asp
50 55 60
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Ser Met Phe Gln Arg Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln
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Asn Glu Gln Met His Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro
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Met Arg Ile Asp Glu Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly
115 120 125
Asp Lys Met Leu Arg Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu
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Leu Phe Ser Tyr Ser Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn
145 150 155 160
Tyr Asp Asn Val His Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln
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<213> Homo sapiens

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Gly	Leu	Gly	Asp	Val	Met	Asp	Ala	Leu	Arg	Leu	Gly	Pro	Asn	Gly	Gly	65	70	75	80
Leu	Leu	Tyr	Cys	Met	Glu	Tyr	Leu	Glu	Ala	Asn	Leu	Asp	Trp	Leu	Arg	85	90	95	
Ala	Lys	Leu	Asp	Pro	Leu	Arg	Gly	His	Tyr	Phe	Leu	Phe	Asp	Cys	Pro	100	105	110	
Gly	Gln	Val	Glu	Leu	Cys	Thr	His	His	Gly	Ala	Leu	Arg	Ser	Ile	Phe	115	120	125	
Ser	Gln	Met	Ala	Gln	Trp	Asp	Leu	Arg	Leu	Thr	Ala	Val	His	Leu	Val	130	135	140	
Asp	Ser	His	Tyr	Cys	Thr	Asp	Pro	Ala	Lys	Phe	Ile	Ser	Val	Leu	Cys	145	150	155	160
Thr	Ser	Leu	Ala	Thr	Met	Leu	His	Val	Glu	Leu	Pro	His	Ile	Asn	Leu	165	170	175	
Leu	Ser	Lys	Met	Asp	Leu	Ile	Glu	His	Tyr	Gly	Lys	Leu	Ala	Phe	Asn	180	185	190	
Leu	Asp	Tyr	Tyr	Thr	Glu	Val	Leu	Asp	Leu	Ser	Tyr	Leu	Leu	Asp	His	195	200	205	
Leu	Ala	Ser	Asp	Pro	Phe	Phe	Arg	His	Tyr	Arg	Gln	Leu	Asn	Glu	Lys	210	215	220	
Leu	Val	Gln	Leu	Ile	Glu	Asp	Tyr	Ser	Leu	Val	Ser	Phe	Ile	Pro	Leu	225	230	235	240
Asn	Ile	Gln	Asp	Lys	Glu	Ser	Ile	Gln	Arg	Val	Leu	Gln	Ala	Val	Asp	245	250	255	
Lys	Ala	Asn	Gly	Tyr	Cys	Phe	Gly	Ala	Gln	Glu	Gln	Arg	Ser	Leu	Glu	260	265	270	
Ala	Met	Met	Ser	Ala	Ala	Met	Gly	Ala	Asp	Phe	His	Phe	Ser	Ser	Thr	275	280	285	
Leu	Gly	Ile	Gln	Glu	Lys	Tyr	Leu	Ala	Pro	Ser	Asn	Gln	Ser	Val	Glu	290	295	300	
Gln	Glu	Ala	Met	Gln	Leu														

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<211> 1515
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (26).. (565)

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gcgttcagag aaggattgcc ccagagaccc gtggtggact tcatgggtgc tgagtggccc 300
gtgtgacagt gatgacacga aggcttcggc gtttgagtgg gtgcagggtgc accccagggc 360
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gagccaggac acacgtcagc ccagcagggtg tgggggggtgc tgcagccctc ggcaagtggg 480
tcaggccctg ggggatgttt ccaatggtgg gcagcctggc caggccggag aagacatgtt 540
cacgggcatc tatcagatgc ccccttgagg aggctgggtt atttgagggc tgctgcaaag 600
tacgctaggc tcaaattctc ttttcccagc cagagccctg gccacacgga ctgagagggg 660
ccaccggggg ggggaaagga cccctcccg acccccgca gccactggcc tccagctctc 720
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gcgcctgtag cccagctac ttgggaggct gaggcgggag aatggcaatg gcgtgaaccc 1440
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gccagactca atctc 1515

<210> 14209
<211> 180
<212> PRT
<213> Homo sapiens

<400> 14209
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Ala Gly Pro Ala His Gln Ser Trp Ala Arg Arg Gly Ser Lys Gln His
35 40 45
Pro Ala Val Arg Gly Ser Leu Arg Pro Gly Met Arg Gly Trp Gln Thr
50 55 60
Trp Glu Ser Gln Gly Arg Val Leu Arg Ser Glu Lys Asp Cys Pro Arg
65 70 75 80
Asp Pro Trp Trp Thr Ser Trp Val Leu Ser Gly Pro Cys Asp Ser Asp
85 90 95
Asp Thr Lys Ala Ser Ala Phe Glu Trp Val Gln Val His Ala Arg Ala
100 105 110
Trp Cys Phe Pro Ala Trp Pro Trp Arg Glu Leu Gly Gly Leu Ala Ser
115 120 125
Gly Glu Asp Arg Ser Gln Asp Thr Arg Gln Pro Ser Arg Cys Gly Gly
130 135 140
Cys Cys Ser Pro Arg Gln Trp Gly Gln Ala Leu Gly Asp Val Ser Asn
145 150 155 160
Gly Gly Gln Pro Gly Gln Ala Gly Glu Asp Met Phe Thr Gly Ile Tyr
165 170 175
Gln Met Pro Pro
180

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<211> 1274
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (17).. (1063)

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gacggaaaac ggggtccaac ccccgaaagc ggctgccttt ccgccaggct ttagcatttc 180
ggagattaaa aacaaacagc ggcgacactt aatgttcacg cgggtggaaac agcagcagcg 240
gaaggaaaag ttggcagcta agaaaaaact taaaaaagaa agagaggctc ttggcgataa 300
ggctccacca aagcctgtac ccaagaccat tgacaaccag cgagtgtatg atgaaaccac 360
agtagaccct aatgatgaag aggtcgctta tgatgaagct acagatgaat ttgcttctta 420
cttcaacaaa cagacttctc ccaagattct catcacaaca tcagatagac ctcatgggag 480
aacagtacga ctctgtgaac agctctccac agttatacca aactcacatg ttattacag 540
aagaggactg gctctgaaaa aaattattcc acagtgcacg gcaagagatt tcacagacct 600
gattgttatt aatgaagatc gtaaaacccc aaatggactt attttgagtc acttgccaaa 660
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aggcaaggac cccacagaac acatacctga aataattctg aataatttta caacacggct 780

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<210> 14211
<211> 349
<212> PRT
<213> Homo sapiens

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Asp Gly Ala Thr Glu Asn Gly Val Gln Pro Pro Lys Ala Ala Ala Phe
35 40 45
Pro Pro Gly Phe Ser Ile Ser Glu Ile Lys Asn Lys Gln Arg Arg His
50 55 60
Leu Met Phe Thr Arg Trp Lys Gln Gln Gln Arg Lys Glu Lys Leu Ala
65 70 75 80
Ala Lys Lys Lys Leu Lys Lys Glu Arg Glu Ala Leu Gly Asp Lys Ala
85 90 95
Pro Pro Lys Pro Val Pro Lys Thr Ile Asp Asn Gln Arg Val Tyr Asp
100 105 110
Glu Thr Thr Val Asp Pro Asn Asp Glu Glu Val Ala Tyr Asp Glu Ala
115 120 125
Thr Asp Glu Phe Ala Ser Tyr Phe Asn Lys Gln Thr Ser Pro Lys Ile
130 135 140
Leu Ile Thr Thr Ser Asp Arg Pro His Gly Arg Thr Val Arg Leu Cys
145 150 155 160
Glu Gln Leu Ser Thr Val Ile Pro Asn Ser His Val Tyr Tyr Arg Arg
165 170 175
Gly Leu Ala Leu Lys Lys Ile Ile Pro Gln Cys Ile Ala Arg Asp Phe
180 185 190
Thr Asp Leu Ile Val Ile Asn Glu Asp Arg Lys Thr Pro Asn Gly Leu
195 200 205
Ile Leu Ser His Leu Pro Asn Gly Pro Thr Ala His Phe Lys Met Ser
210 215 220
Ser Val Arg Leu Arg Lys Glu Ile Lys Arg Arg Gly Lys Asp Pro Thr
225 230 235 240
Glu His Ile Pro Glu Ile Ile Leu Asn Asn Phe Thr Thr Arg Leu Gly

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			260					265					270						
Phe	Ile	Gly	Arg	Gln	Val	Ala	Thr	Phe	His	Asn	Gln	Arg	Asp	Tyr	Ile				
		275					280				285								
Phe	Phe	Arg	Phe	His	Arg	Tyr	Ile	Phe	Arg	Ser	Glu	Lys	Lys	Val	Gly				
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Ile	Gln	Glu	Leu	Gly	Pro	Arg	Phe	Thr	Leu	Lys	Leu	Arg	Ser	Leu	Gln				
305					310				315						320				
Lys	Gly	Thr	Phe	Asp	Ser	Lys	Tyr	Gly	Glu	Tyr	Glu	Trp	Val	His	Lys				
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Pro	Arg	Glu	Met	Asp	Thr	Ser	Arg	Arg	Lys	Phe	His	Leu							
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 <211> 3623
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (564).. (2426)

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 agcagctcct ctgcatagtt ttgatgaagc acgtaagatt ccaactgtag ccactttcac 360
 tatacctcgg gaaccaccto catctccagc agaagtgaag ttctttccca agaaacaaag 420
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<210> 14213

<211> 621

<212> PRT

<213> Homo sapiens

<400> 14213

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Leu Trp Asp Tyr Asp Phe Leu Ile Tyr Asp Gly Val Ile Asp Asn Thr
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Ala Pro Asp Phe Leu Ala Phe Lys Glu His Phe Ser Leu Ala Trp Gly
35 40 45
Gly Ile Phe Ser Leu Leu Glu His Val Glu Lys Phe Leu Arg Asn Tyr
50 55 60
Ala Ile Pro Glu Val Lys Ile Lys Gly Asn Asn Leu Val Ala Leu Leu
65 70 75 80
Pro Glu Phe Glu Leu Thr Asn Lys Leu Thr Arg Tyr Asp Leu Leu Ser
85 90 95
Val Leu Glu Asp Pro Ala His Val Gln Met Leu Ile Asn Leu Pro Gly
100 105 110
Gln Arg Tyr Lys Gly Gln Asp Gly Asn Ser Glu Ala Ala Met Lys Ile
115 120 125
Gln Ala Thr Trp Lys Cys Tyr Lys Ala Arg Lys Phe Phe Leu Phe Tyr
130 135 140
Arg Gln Gln Lys Trp Ala Ser Gly Val Ile Ala Ile Ala Trp Leu Leu
145 150 155 160
Tyr Cys His Lys Thr Arg Leu Lys Lys Ile Leu Lys Glu Ser Arg Gln
165 170 175
Arg His Leu Glu Asn Phe Arg Ile Arg Ala Lys His Leu Ala Ala Asn
180 185 190
Trp Asn Arg Ile Arg Thr Ser Arg Arg Thr Ile Ile His Ile Pro Ser
195 200 205
Leu Gly Tyr Ser Gln Pro Val Arg Glu His Ile Ala Asp Phe Asn Thr
210 215 220
Gln Gln Asn Met Gln Leu Gly Arg Leu Cys Asp Ile Leu Asp Ala Asn
225 230 235 240
Val Asn Val Ile Tyr Ile Cys Ser His His Met Asn Asp Glu Leu Val
245 250 255
Leu Tyr Tyr Lys Lys Ile Leu Ser Leu His Ala Ala Val Lys Ser Gly
260 265 270
Asn Leu Glu Asp Arg Ser Asp Leu Gln Asp Arg Phe Lys Ile Ile Thr
275 280 285
Pro Glu Ala Val Asn Ile Phe Pro Met Ile Glu Gln Leu Ser Gln Leu
290 295 300
Ile Thr Asp His Leu Gln Ile Gln Arg Trp Leu Phe Lys Met Asp Ser
305 310 315 320
Glu Phe Arg Gly Asn Gly Thr Ala Phe Cys Asp Ile Pro Ser Tyr Leu
325 330 335
Lys Cys Tyr Lys Trp Val Leu Lys Glu Ser Ser Arg Tyr Gly Leu Glu
340 345 350
Asp Trp Arg Lys Lys Trp Ala Gln Glu Pro Ala Leu Val Lys Ile Ser
355 360 365
Glu Glu Leu Ala Gly Ile Leu Ala Gln His Ala Gln Pro Val Asn Glu
370 375 380
Lys Arg Phe Pro Thr Trp Arg Lys Phe Leu Gln Thr Phe Leu Ser Gln
385 390 395 400

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Thr Val Asp Met Leu Ile Glu Pro Asn Gly Lys Ile Ser Val Leu Ser
420 425 430
Thr Gly Asp Gln Leu His Ala Glu Ser Pro Phe Ile Ser Ser Gly Thr
435 440 445
Thr Val Pro Gln Thr Ser Val Asp Pro Gln Val Leu Thr Tyr Leu Cys
450 455 460
Leu Gln Ile Gly Lys Ala Cys Arg Met Arg Asp Val Val Gly Tyr Phe
465 470 475 480
Ser Ile Asp Leu Val Thr Phe Ile Asp Pro Ser Thr Leu Glu Gln Gln
485 490 495
Val Trp Ala Thr Gly Leu Asn Leu Ala Tyr Ser Asp Gln Leu Ala Leu
500 505 510
Thr Gln Leu Thr Leu Tyr Leu Thr Asn Gly His Leu Asp Cys Ser Leu
515 520 525
Ser Thr Leu Glu Val Pro Arg Phe Val Pro Lys Glu Arg Lys Lys Thr
530 535 540
Lys Cys Met Ser Ala Leu Ser Met Pro Met Leu Ala Thr Ser Arg Tyr
545 550 555 560
Ala Val Met Thr Thr Gln Leu Arg His Ser Asn Leu Ser Leu Val Phe
565 570 575
His Tyr Val Phe Leu Gln Ile Cys Arg Ala His Gly Ile Gly Tyr Asp
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Leu Glu Asn Asn Arg Arg Gly Ser Pro Gly Gly Pro His Asp Leu Cys
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<210> 14214

<211> 2230

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (366).. (2036)

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Asp Gln Leu Arg Lys Lys Val Leu Leu Lys Asn Lys Lys Leu Lys Ala
             35             40             45
His Gln Thr Pro Val Asp Ile Leu Lys Gln Lys Ala His Gln Leu Ala
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Ser Met Gln Val Gln Ala Tyr Asn Gly Gly Asp Ala Asn Pro Arg Pro
             65             70             75             80
Ala Asn Asn Glu Glu Glu Glu Asp Glu Glu Asp Glu Tyr Asp Tyr Asp
             85             90             95
Tyr Glu Ser Leu Ser Asp Asp Asn Ile Leu Glu Asp Arg Pro Glu Asn
             100            105            110
Lys Ser Cys Asn Asp Lys Leu Gln Phe Glu Tyr Asn Glu Glu Ile Pro
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09629469.072300

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Glu	Ser	Arg	Gln	Ile	Ala	Pro	Glu	Leu	Ser	Asp	Leu	Val	Ile	Tyr	Cys
				165					170					175	
Gln	Ala	Val	Lys	Phe	Pro	Gly	Leu	Ser	Thr	Leu	Asn	Ala	Ser	Gly	Ser
			180					185					190		
Ser	Arg	Gly	Lys	Glu	Arg	Lys	Ser	Arg	Lys	Ser	Ile	Phe	Gly	Asn	Asn
		195					200					205			
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	210					215					220				
Gly	Lys	Ser	Ser	Cys	Glu	Gly	Ile	Arg	Gln	Thr	Trp	Glu	Glu	Ser	Ser
225					230					235					240
Ser	Pro	Leu	Asn	Pro	Thr	Thr	Ser	Leu	Ser	Ala	Ile	Ile	Arg	Thr	Pro
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Lys	Cys	Tyr	His	Ile	Ser	Ser	Leu	Asn	Glu	Asn	Ala	Ala	Lys	Arg	Leu
			260					265					270		
Cys	Arg	Arg	Tyr	Ser	Gln	Lys	Leu	Thr	Gln	His	Thr	Ala	Cys	Gln	Leu
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Leu	Arg	Thr	Tyr	Pro	Ala	Ala	Thr	Arg	Ile	Asp	Ser	Ser	Asn	Pro	Asn
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Pro	Leu	Met	Phe	Trp	Leu	His	Gly	Ile	Gln	Leu	Val	Ala	Leu	Asn	Tyr
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Gln	Thr	Asp	Asp	Leu	Pro	Leu	His	Leu	Asn	Ala	Ala	Met	Phe	Glu	Ala
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Leu	Gly	Met	Pro	Leu	Asp	Ser	Cys	His	Phe	Arg	Thr	Lys	Pro	Ile	His
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Arg	Asn	Thr	Leu	Asn	Pro	Met	Trp	Asn	Glu	Gln	Phe	Leu	Phe	His	Val
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Ser	Ser	Ala	Val	Thr	Ala	Gln	Arg	Ile	Ile	Pro	Leu	Lys	Ala	Leu	Lys
	450					455					460				
Arg	Gly	Tyr	Arg	His	Leu	Gln	Leu	Arg	Asn	Leu	His	Asn	Glu	Val	Leu
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Glu	Ile	Ser	Ser	Leu	Phe	Ile	Asn	Ser	Arg	Arg	Met	Glu	Glu	Asn	Ser
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Lys	Cys	Leu	Gln	Thr	His	Arg	Val	Thr	Val	His	Gly	Val	Pro	Gly	Pro
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Thr	Asp	Tyr	Phe	Leu	Met	Glu	Glu	Lys	Tyr	Phe	Ile	Ser	Lys	Glu	Lys
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Asn	Glu	Cys	Arg	Lys	Gln	Pro	Phe	Gln	Arg	Ala	Ile	Gly	Pro	Glu	Glu
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Ile	Lys	Ala	Pro	Arg	Val	Ser	Thr	Ala	Gln	Asp	Val	Ile	Gln	Gln	Thr
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Cys	Val	Phe	Gln	Ala	Gln	Ser	Lys	Trp	Lys	Gly	Ala	Gly	Lys	Phe	Ile
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		755					760					765			
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	770					775					780				
Ile	Gln	Thr	Lys	Glu	Glu	Lys	Pro	Val	Gly	Gly	Leu	Ser	Ser	Ser	Asp
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 <222> (150).. (2066)

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 <212> PRT
 <213> Homo sapiens

<400> 14222

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Lys	Ala	Gln	His	Arg	Val	Thr	Phe	Ile	Glu	Glu	Arg	Tyr	Gly	Lys	Tyr
	35						40					45			
Asn	Ile	Ser	Asp	Pro	Leu	Met	Ala	Leu	Gln	Arg	Asp	Phe	Glu	Thr	Leu
	50					55					60				
Lys	Glu	Lys	Asn	Asp	Gly	Glu	Lys	Gln	Pro	Val	Cys	Thr	Asn	Pro	Leu
65					70					75					80
Ser	Ile	Leu	Lys	Val	Val	Met	Lys	Gln	Cys	Lys	Asn	Met	Gln	Glu	Arg
				85					90					95	
Met	Leu	Ser	Gln	Leu	Ala	Ala	Ala	Glu	Ser	Arg	His	Arg	Lys	Val	Ile
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Leu	Asp	Leu	Glu	Glu	Glu	Arg	Gln	Arg	His	Ala	Gln	Asp	Thr	Ala	Glu
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Gly	Asp	Asp	Val	Thr	Tyr	Met	Leu	Glu	Lys	Glu	Arg	Glu	Arg	Leu	Thr
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Gln	Gln	Leu	Glu	Phe	Glu	Lys	Ser	Gln	Val	Lys	Lys	Phe	Glu	Lys	Glu
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Gln	Lys	Lys	Leu	Ser	Ser	Gln	Leu	Glu	Glu	Glu	Arg	Ser	Arg	His	Lys
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Gln	Leu	Ser	Ser	Met	Leu	Val	Leu	Glu	Cys	Lys	Lys	Ala	Thr	Asn	Lys
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Glu	Phe	Asp	Ile	Glu	Arg	Glu	Gln	Leu	Arg	Ala	Lys	Leu	Asn	Arg	Glu
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Glu	Asn	Arg	Thr	Lys	Thr	Leu	Lys	Glu	Glu	Met	Glu	Ser	Leu	Lys	Lys
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Gly Pro Ala Thr Pro Ala Tyr Ser Tyr Ala Lys Thr Asn Gly His Cys
340 345 350
Asp Pro Glu Ile Gln Thr Thr Arg Glu Leu Thr Ala Gly Asn Asn Val
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Glu Asn Gln Val Pro Pro Arg Glu Lys Ser Val Ala Leu Ala Gln Glu
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Lys Pro Val Glu Asn Gly Gly Cys Pro Val Gly Ile Glu Thr Pro Val
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Pro Met Pro Ser Pro Leu Ser Ser Ser Gly Ser Ser Leu Ser Pro Ser
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Thr Ser Gln Gln Gly Pro Ile Lys Pro Val Ser Pro Asn Ser Ser Pro
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Pro Ser Ala Thr Thr Pro Leu Thr Lys Thr His Ser Gln Ala Ala Ser
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<211> 2650
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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Ile Leu Lys Leu Leu Lys Gly Lys Val Val Val Gly His Ala Leu His
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Asp Thr Thr Tyr Val Pro Asn Phe Leu Ser Glu Pro Gly Leu His Thr
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 <213> Homo sapiens

<400> 14226

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Phe	Ser	Ser	Leu	Ser	Pro	Met	Ala	Arg	Lys	Ile	Met	Gln	Asp	Lys	Glu
		35					40				45				
Lys	Ile	Arg	Glu	Lys	Tyr	Gly	Pro	Glu	Trp	Ala	Arg	Leu	Pro	Pro	Ala
	50					55				60					
Gln	Gln	Asp	Glu	Ile	Ile	Asp	Arg	Cys	Leu	Val	Gly	Pro	Arg	Ala	Pro
65				70				75						80	
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Leu	Thr	Trp	Gln	Asp	Glu	His	Ser	Ala	Pro	Phe	Ser	Trp	Glu	Thr	Lys
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Glu	Glu	Glu	Ile	Ser	Ile	Lys	Glu	Ala	Gly	Gln	Met	Glu	Gly	Val	Val
	65				70					75				80	
Glu	Glu	Val	Ala	Thr	Lys	Met	Val	Val	Ile	Glu	Ile	Gln	Val	Ser	Ser
			85					90						95	
Gln	Val	Ala	Ile	Met	Val	Ala	Thr	Ala	Val	Val	Ala	Ile	Lys	Ala	Glu
		100					105					110			
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	130					135				140					
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Glu	Val	Val	Val	Gln	Ala	Arg	Glu	Glu	Ala	Gly	Glu	Glu	Glu	Gly	Ala
			165					170						175	
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<211> 519

<212> PRT

<213> Homo sapiens

<400> 14230

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Gln	Leu	Lys	Lys	Ile	Leu	Gly	Met	Phe	Thr	Ser	Gln	Gln	Trp	Lys	His	130	135	140	
Leu	Ser	Asn	Asp	Phe	Leu	Lys	Thr	Gln	Gln	Glu	Lys	Arg	His	Ser	Trp	145	150	155	160
Phe	Lys	Ala	Ser	Gly	Thr	Ile	Lys	Lys	Phe	Arg	Ala	Gly	Leu	Ser	Ile	165	170	175	
Phe	Ser	Pro	Ile	Pro	Lys	Ser	Pro	Ser	Phe	Pro	Ile	Ile	Gln	Asp	Ser	180	185	190	
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Phe	Gly	Tyr	Pro	Pro	Ser	Pro	Gln	Ala	Gly	Leu	Leu	Cys	Pro	Gln	His	225	230	235	240
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<210> 14236
 <211> 203
 <212> PRT
 <213> Homo sapiens

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35 40 45
Leu Lys Pro Ala Gln Glu Lys Val Lys Glu Gly Lys Ile Phe Asp Asp
50 55 60
Val Ser Ser Gly Val Ser Gln Leu Ala Ser Lys Val Gln Gly Val Gly
65 70 75 80
Ser Lys Gly Trp Arg Asp Val Thr Thr Phe Phe Ser Gly Lys Ala Glu
85 90 95
Gly Pro Leu Asp Ser Pro Ser Glu Gly His Ser Tyr Gln Asn Ser Gly
100 105 110
Leu Asp His Phe Gln Asn Ser Asn Ile Asp Gln Ser Phe Trp Glu Thr
115 120 125
Phe Gly Ser Ala Glu Pro Thr Lys Thr Arg Lys Ser Pro Ser Ser Asp
130 135 140
Ser Trp Thr Cys Ala Asp Thr Ser Thr Glu Arg Arg Ser Ser Asp Ser
145 150 155 160
Trp Glu Val Trp Gly Ser Ala Ser Thr Asn Arg Asn Ser Asn Ser Asp
165 170 175
Gly Gly Glu Gly Gly Glu Gly Thr Lys Lys Ala Val Pro Pro Ala Val
180 185 190
Pro Thr Asp Asp Gly Trp Asp Asn Gln Asn Trp
195 200

<210> 14237
<211> 1449
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (173).. (691)

<400> 14237
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taagtactcc tctaccctta gttcacataa gagaagtcac actggagaga aaccctacaa 360
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caagtgggtcc tcacacctta ctatacaactg agagtctctga acttactctg taaccatccc 780
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<210> 14238
 <211> 173
 <212> PRT
 <213> Homo sapiens

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<400> 14238
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      20      25      30
Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Lys Tyr Ser Ser Thr
      35      40      45
Leu Ser Ser His Lys Arg Ser His Thr Gly Glu Lys Pro Tyr Lys Cys
      50      55      60
Glu Glu Cys Gly Lys Ala Phe Val Ala Ser Ser Thr Leu Ser Lys His
      65      70      75      80
Glu Ile Ile His Thr Gly Lys Lys Pro Tyr Lys Cys Glu Glu Cys Gly
      85      90      95
Lys Ala Phe Asn Gln Ser Ser Ser Leu Thr Lys His Lys Lys Ile His
      100      105      110
Thr Gly Glu Lys Pro Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn
      115      120      125
Gln Ser Ser Ser Leu Thr Lys His Lys Lys Ile His Ser Gly Glu Lys
      130      135      140
Pro Tyr Glu Cys Asp Lys Cys Gly Lys Ala Phe Ile Ser Pro Ser Ser
      145      150      155      160
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      165      170

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<210> 14239
 <211> 2510
 <212> DNA
 <213> Homo sapiens

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<220>

<221> CDS

<222> (230).. (1345)

<400> 14239

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<210> 14240
 <211> 372
 <212> PRT
 <213> Homo sapiens

<400> 14240

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			20					25					30		
Leu	Pro	Gly	Pro	Tyr	Gly	Ala	Leu	Pro	Pro	Gly	Gln	Glu	Leu	Ser	His
		35					40					45			
Pro	Ala	Ser	Leu	Phe	Thr	Ala	Thr	Gly	Ala	Val	His	Ala	Ala	Ala	Asn
	50					55				60					
Pro	Phe	Thr	Ala	Ala	Pro	Gly	Ala	His	Gly	Pro	Phe	Leu	Ser	Pro	Ser
65					70					75					80
Thr	His	Ile	Asp	Pro	Phe	Gly	Arg	Pro	Thr	Ser	Phe	Ala	Ser	Leu	Ala
			85					90					95		
Ala	Leu	Ser	Asn	Gly	Ala	Phe	Gly	Gly	Leu	Gly	Ser	Pro	Thr	Phe	Asn
			100				105						110		
Ser	Gly	Ala	Val	Phe	Ala	Gln	Lys	Glu	Ser	Pro	Gly	Ala	Pro	Pro	Ala
	115					120					125				
Phe	Ala	Ser	Pro	Pro	Asp	Pro	Trp	Gly	Arg	Leu	His	Arg	Ser	Pro	Leu
130					135					140					
Thr	Phe	Pro	Ala	Trp	Val	Arg	Pro	Pro	Glu	Ala	Ala	Arg	Thr	Pro	Gly
145					150					155					160
Ser	Asp	Lys	Glu	Arg	Pro	Val	Glu	Arg	Arg	Glu	Pro	Ser	Ile	Thr	Lys
			165					170					175		
Glu	Glu	Lys	Asp	Arg	Asp	Leu	Pro	Phe	Ser	Arg	Pro	Gln	Leu	Arg	Val
			180					185					190		
Ser	Pro	Ala	Thr	Pro	Lys	Ala	Arg	Ala	Gly	Glu	Glu	Gly	Pro	Arg	Pro
	195					200						205			
Thr	Lys	Glu	Ser	Val	Arg	Val	Lys	Glu	Glu	Arg	Lys	Glu	Glu	Ala	Ala
210						215						220			
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala
225					230					235					240
Ala	Thr	Gly	Pro	Gln	Gly	Leu	His	Leu	Leu	Phe	Glu	Arg	Pro	Arg	Pro
			245					250					255		
Pro	Pro	Phe	Leu	Gly	Pro	Ser	Pro	Pro	Asp	Arg	Cys	Ala	Gly	Phe	Leu
			260					265					270		
Glu	Pro	Thr	Trp	Leu	Ala	Ala	Pro	Pro	Arg	Leu	Ala	Arg	Pro	Pro	Arg
		275					280					285			
Phe	Tyr	Glu	Ala	Gly	Glu	Glu	Leu	Thr	Gly	Pro	Gly	Ala	Val	Ala	Ala
290					295						300				
Ala	Arg	Leu	Tyr	Gly	Leu	Glu	Pro	Ala	His	Pro	Leu	Leu	Tyr	Ser	Arg
305					310					315					320
Leu	Ala	Pro	Pro	Pro	Pro	Pro	Ala	Ala	Ala	Pro	Gly	Thr	Pro	His	Leu

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325 330 335
Leu Ser Lys Thr Pro Pro Gly Ala Leu Leu Gly Ala Pro Pro Pro Leu
340 345 350
Val Pro Ala Pro Arg Pro Ser Ser Pro Pro Arg Gly Pro Gly Pro Ala
355 360 365
Arg Ala Asp Arg
370

<210> 14241
<211> 3114
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1).. (3114)

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<210> 14242
 <211> 1038
 <212> PRT
 <213> Homo sapiens

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<400> 14242
Met Pro Val His Met Val Pro Thr Glu Leu Val Glu Lys Glu Phe Trp
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Arg Leu Val Ser Thr Ile Glu Glu Asp Val Thr Val Glu Tyr Gly Ala
             20             25             30
Asp Ile Ala Ser Lys Glu Phe Gly Ser Gly Phe Pro Val Arg Asp Gly
             35             40             45
Lys Ile Lys Leu Ser Pro Glu Glu Glu Glu Tyr Leu Asp Ser Gly Trp
             50             55             60
Asn Leu Asn Asn Met Pro Val Met Glu Gln Ser Val Leu Ala His Ile
             65             70             75             80
Thr Ala Asp Ile Cys Gly Met Lys Leu Pro Trp Leu Tyr Val Gly Met
             85             90             95
Cys Phe Ser Ser Phe Cys Trp His Ile Glu Asp His Trp Ser Tyr Ser
             100            105            110
Ile Asn Tyr Leu His Trp Gly Glu Pro Lys Thr Trp Tyr Gly Val Pro
             115            120            125
Gly Tyr Ala Ala Glu Gln Leu Glu Asn Val Met Lys Lys Leu Ala Pro

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130	135	140
Glu Leu Phe Val Ser Gln Pro Asp Leu Leu His Gln Leu Val Thr Ile		
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Met Asn Pro Asn Thr Leu Met Thr His Glu Val Pro Val Tyr Arg Thr		
	165	170
Asn Gln Cys Ala Gly Glu Phe Val Ile Thr Phe Pro Arg Ala Tyr His		
	180	185
Ser Gly Phe Asn Gln Gly Phe Asn Phe Ala Glu Ala Val Asn Phe Cys		
	195	200
Thr Val Asp Trp Leu Pro Leu Gly Arg Gln Cys Val Glu His Tyr Arg		
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Leu Leu His Arg Tyr Cys Val Phe Ser His Asp Glu Met Ile Cys Lys		
225	230	235
Met Ala Ser Lys Ala Asp Val Leu Asp Val Val Val Ala Ser Thr Val		
	245	250
Gln Lys Asp Met Ala Ile Met Ile Glu Asp Glu Lys Ala Leu Arg Glu		
	260	265
Thr Val Arg Lys Leu Gly Val Ile Asp Ser Glu Arg Met Asp Phe Glu		
	275	280
Leu Leu Pro Asp Asp Glu Arg Gln Cys Val Lys Cys Lys Thr Thr Cys		
	290	295
Phe Met Ser Ala Ile Ser Cys Ser Cys Lys Pro Gly Leu Leu Val Cys		
305	310	315
Leu His His Val Lys Glu Leu Cys Ser Cys Pro Pro Tyr Lys Tyr Lys		
	325	330
Leu Arg Tyr Arg Tyr Thr Leu Asp Asp Leu Tyr Pro Met Met Asn Ala		
	340	345
Leu Lys Leu Arg Ala Glu Ser Tyr Asn Glu Trp Ala Leu Asn Val Asn		
	355	360
Glu Ala Leu Glu Ala Lys Ile Asn Lys Lys Lys Ser Leu Val Ser Phe		
	370	375
Lys Ala Leu Ile Glu Glu Ser Glu Met Lys Lys Phe Pro Asp Asn Asp		
385	390	395
Leu Leu Arg His Leu Arg Leu Val Thr Gln Asp Ala Glu Lys Cys Ala		
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	420	425
Ser Gly Gly Gly Lys Ser Gln Asn Gln Leu Thr Val Asn Glu Leu Arg		
	435	440
Gln Phe Val Thr Gln Leu Tyr Ala Leu Pro Cys Val Leu Ser Gln Thr		
	450	455
Pro Leu Leu Lys Asp Leu Leu Asn Arg Val Glu Asp Phe Gln Gln His		
465	470	475
Ser Gln Lys Leu Leu Ser Glu Glu Thr Pro Ser Ala Ala Glu Leu Gln		
	485	490
Asp Leu Leu Asp Val Ser Phe Glu Phe Asp Val Glu Leu Pro Gln Leu		
	500	505
Ala Glu Met Arg Ile Arg Leu Glu Gln Ala Arg Trp Leu Glu Glu Val		

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His	Leu	Asn	Ser	Leu	Pro	Arg	Leu	Glu	Thr	Leu	Val	Ala	Glu	Val	Gln	
			660					665					670			
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Tyr	Ser	Leu	Leu	Glu	Val	Leu	Cys	Pro	Arg	Cys	Asp	Ile	Gly	Leu	Leu	
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Gly	Leu	Lys	Arg	Lys	Gln	Arg	Lys	Leu	Lys	Glu	Pro	Leu	Pro	Asn	Gly	
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Lys	Lys	Lys	Ser	Thr	Lys	Leu	Glu	Ser	Leu	Ser	Asp	Leu	Glu	Arg	Ala	
				725					730					735		
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785					790					795					800	
Arg	Asp	Ala	Phe	His	Thr	Ser	Cys	Val	Ala	Val	Pro	Ser	Ile	Ser	Gln	
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Pro	Leu	Glu	Lys	Ile	Leu	Pro	Leu	Leu	Ala	Ser	Leu	Gln	Arg	Ile	Arg	
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Val	Arg	Leu	Pro	Glu	Gly	Asp	Ala	Leu	Arg	Tyr	Met	Ile	Glu	Arg	Thr	
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Val	Asn	Trp	Gln	His	Arg	Ala	Gln	Gln	Leu	Leu	Ser	Ser	Gly	Asn	Leu	
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Lys	Phe	Val	Gln	Asp	Arg	Val	Gly	Ser	Gly	Leu	Leu	Tyr	Ser	Arg	Trp	
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Leu Gln Val Ser Leu Pro Glu Ile Gln Glu Leu Tyr Gln Thr Leu Leu
965 970 975
Ala Lys Pro Ser Pro Ala Gln Gln Thr Asp Arg Ser Ser Pro Val Arg
980 985 990
Pro Ser Ser Glu Lys Asn Asp Cys Cys Arg Gly Lys Arg Asp Gly Ile
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<212> DNA
<213> Homo sapiens

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<222> (69).. (578)

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 <213> Homo sapiens

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Gly Gly Leu Cys Tyr Tyr Leu Ser Pro Pro Glu Ser Phe Gly Ser Val
             35             40             45
Leu Glu Asp Pro Val His Ala Val Val Tyr Ile Val Phe Met Leu Gly
             50             55             60
Ser Cys Ala Phe Phe Ser Lys Thr Trp Ile Glu Val Ser Gly Ser Ser
             65             70             75             80
Ala Lys Asp Val Ala Lys Gln Leu Lys Glu Gln Gln Met Val Met Arg
             85             90             95
Gly His Arg Glu Thr Ser Met Val His Glu Leu Asn Arg Tyr Ile Pro
             100            105            110
Thr Ala Ala Ala Phe Gly Gly Leu Cys Ile Gly Ala Leu Ser Val Leu

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Glu Val Gly Ser Met Gly Ala Leu Leu Phe		160
165	170	

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<212> DNA
<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 Pro Val Ile Ser Thr Met Pro Ser Gln Thr Val Leu Pro Pro Glu Pro
 35 40 45
 Val Gln Leu Cys Lys Ser Glu Gln Arg Pro Ser Ser Leu Pro Val Gly
 50 55 60
 Pro Val Leu Ala Thr Leu Gly His His Gln Thr Pro Thr Pro Asn Ser
 65 70 75 80
 Thr Gly Ser Gly His Ser Pro Pro Ser Ser Ser Leu Thr Ser Pro Ser
 85 90 95
 His Val Asn Leu Ser Pro Asn Thr Val Pro Glu Phe Ser Tyr Ser Ser
 100 105 110
 Ser Glu Asp Glu Phe Tyr Asp Ala Asp Glu Phe His Gln Ser Gly Ser
 115 120 125
 Ser Pro Lys Arg Leu Ile Asp Ser Ser Gly Ser Ala Ser Val Leu Thr
 130 135 140
 His Ser Ser Ser Gly Asn Ser Leu Lys Arg Pro Asp Thr Thr Glu Ser
 145 150 155 160
 Leu Asn Ser Ser Leu Ser Asn Gly Thr Ser Asp Ala Asp Leu Phe Asp
 165 170 175
 Ser His Asp Asp Arg Asp Asp Ala Glu Ala Gly Ser Val Glu Glu
 180 185 190
 His Lys Ser Val Ile Met His Leu Leu Ser Gln Val Arg Leu Gly Met
 195 200 205
 Asp Leu Thr Lys Val Val Leu Pro Thr Phe Ile Leu Glu Arg Arg Ser
 210 215 220

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Leu	Leu	Glu	Met	Tyr	Ala	Asp	Phe	Phe	Ala	His	Pro	Asp	Leu	Phe	Val
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Lys	Trp	Tyr	Leu	Ser	Ala	Phe	His	Ala	Gly	Arg	Lys	Gly	Ser	Val	Ala
			260						265					270	
Lys	Lys	Pro	Tyr	Asn	Pro	Ile	Leu	Gly	Glu	Ile	Phe	Gln	Cys	His	Trp
		275						280					285		
Thr	Leu	Pro	Asn	Asp	Thr	Glu	Glu	Asn	Thr	Glu	Leu	Val	Ser	Glu	Gly
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Pro	Val	Pro	Trp	Val	Ser	Lys	Asn	Ser	Val	Thr	Phe	Val	Ala	Glu	Gln
305						310					315				320
Val	Ser	His	His	Pro	Pro	Ile	Ser	Ala	Phe	Tyr	Ala	Glu	Cys	Phe	Asn
				325						330					335
Lys	Lys	Ile	Gln	Phe	Asn	Ala	His	Ile	Trp	Thr	Lys	Ser	Lys	Phe	Leu
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Ile	Asn	Cys	Ser	Lys	Thr	Gly	Tyr	Ser	Ala	Asn	Ile	Ile	Phe	His	Thr
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Asn	Leu	Lys	Ile	Arg	Asp	Ile	Asp	Ala	Ala	Thr	Glu	Ala	Lys	His	Arg
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Leu	Glu	Glu	Arg	Gln	Arg	Ala	Glu	Ala	Arg	Glu	Arg	Lys	Glu	Lys	Glu
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Ile	Gln	Trp	Glu	Thr	Arg	Leu	Phe	His	Glu	Asp	Gly	Glu	Cys	Trp	Val
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<211> 2421

<212> DNA

<213> Homo sapiens

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<220>

<221> CDS

<222> (72).. (398)

<400> 14247

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 <213> Homo sapiens

<400> 14256

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008240" 6942960

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Thr	Gly	Asp	Gly	Lys	Phe	Ile	Asp	Gln	Phe	Val	Tyr	Ser	Thr	Lys	Gly	
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<400> 14259

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Gly Asp Glu Gly Glu Lys Lys Ser Thr Phe Met Asp Leu Ala Lys Glu
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Asn Arg Thr Ile Ser Ser Val His Gly Leu Asn Asn Asp Ile Val Lys
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Gln Asp Ile Glu Arg Leu Ile His Gln Ser Asp Ile Ile Asp Arg Val

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<400> 14261

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Pro Pro Leu Pro Ala Tyr Asp Phe Leu Ser Met Ile Asp Ala Ala Thr
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09629469-072800

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<210> 14271

<211> 498

<212> PRT

<213> Homo sapiens

<400> 14271

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Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala Ser Gly Ser
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Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val Asp Ser Asp
100 105 110
Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu Arg Asp Phe
115 120 125
Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly Ile Arg Gly
130 135 140
Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile Pro Val Glu
145 150 155 160
Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala Met Asn Ile
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Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala Gly Leu Leu
180 185 190
Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr Arg Lys Gln
195 200 205
Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu Lys Phe Ala
210 215 220
Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr Tyr Leu Thr
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Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser Ile Glu Ala
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Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln Cys Val Ser
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Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg Asp Tyr Pro
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Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile Phe Glu Gly
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Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly Leu Gln His
305 310 315 320
Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys Gln Ala Lys
325 330 335
Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg Asp Ser Leu
340 345 350
Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly Val Val His
355 360 365
Pro Ser Leu Ala Asp Ser Ala Asn Lys Phe Glu Glu Asn Thr Tyr Cys
370 375 380
Phe Gly Arg Thr Val Glu Thr Leu Leu Leu Arg Phe Gly Lys Thr Ile
385 390 395 400
Met Glu Glu Gln Leu Val Leu Lys Arg Val Ala Asn Ile Leu Ile Asn
405 410 415
Leu Tyr Gly Met Thr Ala Val Leu Ser Arg Ala Ser Arg Ser Ile Arg
420 425 430

009270" 69462960

Ile Gly Leu Arg Asn His Asp His Glu Val Leu Leu Ala Asn Thr Phe
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Cys Val Glu Ala Tyr Leu Gln Asn Leu Phe Ser Leu Ser Gln Leu Asp
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Lys Tyr Ala Pro Glu Asn Leu Asp Glu Gln Ile Lys Lys Val Ser Gln
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<211> 2057
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (387).. (2057)

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 <212> PRT
 <213> Homo sapiens

<400> 14273

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Lys	Ser	Phe	His	Gln	Thr	Phe	Ala	Thr	Trp	Val	Lys	Gln	Gly	Gln	Ser
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Asn	Ser	Gly	Val	Val	Gln	Val	Gln	Gln	Lys	Val	Leu	Gly	Ile	Ile	Pro
	50					55					60				
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65					70				75					80	
Thr	Ala	Thr	Val	Thr	Ile	Arg	Pro	Asn	Thr	Ser	Gly	Ser	Gly	Gly	Thr
				85					90					95	
Thr	Ser	Asn	Ser	Gln	Val	Ile	Thr	Gly	Pro	Gln	Ile	Arg	Pro	Gly	Met
		100						105				110			
Thr	Val	Ile	Arg	Thr	Pro	Leu	Gln	Gln	Ser	Thr	Leu	Gly	Lys	Ala	Ile
	115						120				125				
Ile	Arg	Thr	Pro	Val	Met	Val	Gln	Pro	Gly	Ala	Pro	Gln	Gln	Val	Met
130					135					140					
Thr	Gln	Ile	Ile	Arg	Gly	Gln	Pro	Val	Ser	Thr	Ala	Val	Ser	Ala	Pro
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			165						170				175		
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Gln	Gly	Gln	Val	Lys	Leu	Thr	Met	Ala	Gln	Leu	Thr	Gln	Leu	Thr	Gln
	195						200				205				
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210					215						220				
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225				230						235				240	
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275 280 285
Gln Arg Gln Ser Lys Leu Ser Pro Gln Met Gln Val His Gln Asp Lys
290 295 300
Thr Leu Pro Pro Ala Gln Ser Ser Ser Val Gly Pro Ala Glu Ala Gln
305 310 315 320
Pro Gln Thr Ala Gln Pro Ser Ala Gln Pro Gln Pro Gln Thr Gln Pro
325 330 335
Gln Ser Pro Ala Gln Pro Glu Val Gln Thr Gln Pro Glu Val Gln Thr
340 345 350
Gln Thr Thr Val Ser Ser His Val Pro Ser Glu Ala Gln Pro Thr His
355 360 365
Ala Gln Ser Ser Lys Pro Gln Val Ala Ala Gln Ser Gln Pro Gln Ser
370 375 380
Asn Val Gln Gly Gln Ser Pro Val Arg Val Gln Ser Pro Ser Gln Thr
385 390 395 400
Arg Ile Arg Pro Ser Thr Pro Ser Gln Leu Ser Pro Gly Gln Gln Ser
405 410 415
Gln Val Gln Thr Thr Thr Ser Gln Pro Ile Pro Ile Gln Pro His Thr
420 425 430
Ser Leu Gln Ile Pro Ser Gln Gly Gln Pro Gln Ser Gln Pro Gln Val
435 440 445
Val Met Lys His Asn Ala Val Ile Glu His Leu Lys Gln Lys Lys Ser
450 455 460
Met Thr Pro Ala Glu Arg Glu Glu Asn Gln Arg Met Ile Val Cys Asn
465 470 475 480
Gln Val Met Lys Tyr Ile Leu Asp Lys Ile Asp Lys Glu Glu Lys Gln
485 490 495
Ala Ala Lys Lys Arg Lys Arg Glu Glu Ser Val Glu Gln Lys Arg Ser
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Lys Gln Asn Ala Thr Lys Leu Ser Ala Leu Leu Phe Lys His Lys Glu
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<211> 2415
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

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<222> (43).. (1806)

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<211> 588

<212> PRT

<213> Homo sapiens

<400> 14275

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Pro	Met	Ala	Thr	Arg	Leu	Leu	Cys	Glu	His	Ala	Glu	Lys	Leu	Ser	
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Asn	Thr	Ala	Ile	Leu	Ile	Ala	Leu	Asn	Lys	Arg	Glu	Tyr	Glu	Ile	Pro
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Ser	Asn	Leu	Thr	Pro	Ala	Asp	Val	Phe	Phe	Arg	Glu	Val	Ser	Gln	Val
	115						120					125			
Asp	Thr	Ile	Cys	Glu	Cys	Leu	Leu	Glu	His	Glu	Glu	Gln	Val	Leu	Arg
	130					135					140				
Asp	Ala	Pro	Met	Asp	Ser	Ile	Glu	Trp	Ala	Glu	Val	Val	Ile	Asn	Val
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		180						185					190		
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	195						200					205			
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			245						250					255	
Lys	Ser	Ser	Asn	Arg	Glu	Arg	Tyr	Asp	Asn	Leu	Glu	Met	Glu	Tyr	Leu
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Gln	Lys	Arg	Ser	Asp	Leu	Leu	Ser	Pro	Leu	Leu	Ser	Leu	Gly	Gln	Tyr
		275					280					285			
Leu	Trp	Ala	Ala	Ser	Leu	Ala	Glu	Lys	Tyr	Cys	Asp	Phe	Asp	Ile	Leu
	290					295					300				
Val	Gln	Met	Cys	Glu	Gln	Thr	Asp	Asn	Gln	Ser	Arg	Leu	Gln	Arg	Tyr
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Met	Thr	Gln	Phe	Ala	Asp	Gln	Asn	Phe	Ser	Asp	Phe	Leu	Phe	Arg	Trp
			325						330					335	
Tyr	Leu	Glu	Lys	Gly	Lys	Arg	Gly	Lys	Leu	Leu	Ser	Gln	Pro	Ile	Ser
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Trp	Leu	His	Glu	Ile	Asn	Ser	Gln	Glu	Leu	Glu	Lys	Ala	His	Ala	Thr
		370				375					380				
Leu	Leu	Gly	Leu	Ala	Asn	Met	Glu	Thr	Arg	Tyr	Phe	Ala	Lys	Lys	Lys
385					390					395					400
Thr	Leu	Leu	Gly	Leu	Ser	Lys	Leu	Ala	Ala	Leu	Ala	Ser	Asp	Phe	Ser
			405					410						415	
Glu	Asp	Met	Leu	Gln	Glu	Lys	Ile	Glu	Glu	Met	Ala	Glu	Gln	Glu	Arg
		420						425					430		
Phe	Leu	Leu	His	Gln	Glu	Thr	Leu	Pro	Glu	Gln	Leu	Leu	Ala	Glu	Lys
		435					440				445				
Gln	Leu	Asn	Leu	Ser	Ala	Met	Pro	Val	Leu	Thr	Ala	Pro	Gln	Leu	Ile
	450					455					460				
Gly	Leu	Tyr	Ile	Cys	Glu	Asn	Arg	Arg	Ala	Asn	Glu	Tyr	Asp	Phe	
465					470				475					480	
Lys	Lys	Ala	Leu	Asp	Leu	Leu	Glu	Tyr	Ile	Asp	Glu	Glu	Glu	Asp	Ile
			485					490						495	
Asn	Ile	Asn	Asp	Leu	Lys	Leu	Glu	Ile	Leu	Cys	Lys	Ala	Leu	Gln	Arg
			500					505					510		
Asp	Asn	Trp	Ser	Ser	Ser	Asp	Gly	Lys	Asp	Asp	Pro	Ile	Glu	Val	Ser
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Lys	Asp	Ser	Ile	Phe	Val	Lys	Ile	Leu	Gln	Lys	Leu	Leu	Lys	Asp	Gly
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Asp	Gln	Leu	Gly	Ser	Leu	Lys	Ser	Asn	Pro	Tyr	Phe	Glu	Phe	Val	Leu
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Lys	Ala	Asn	Tyr	Glu	Tyr	Tyr	Val	Gln	Gly	Gln	Ile				
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (7).. (2217)

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 tcaggccaag agcattgggt tactgaatta ccacctgtgt taacatttga attgtcaaga 180
 tttgaattta atcaggcatt gggaagacca gaaaaaattc acaacaaatt agaatttccc 240
 caagttttat atttggacag atacatgcac agaaacagag aaataacaag aattaagagg 300
 gaagagatca agagactgaa agattacctc acggtattac aacaaaggct agaaagatat 360

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<212> PRT

<213> Homo sapiens

<400> 14277

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<400> 14279

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 Arg Leu Ala Phe Leu Arg Trp Glu Phe Pro Asn Phe Asn Ser Arg Ser
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<212> DNA
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<210> 14283
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 14283

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			20					25					30		
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Tyr	Ile	Pro	Thr	Ala	Ala	Ala	Phe	Gly	Gly	Leu	Cys	Ile	Gly	Ala	Leu
	50				55					60					
Ser	Val	Leu	Ala	Asp	Phe	Leu	Gly	Ala	Ile	Gly	Ser	Gly	Thr	Gly	Ile
65				70				75						80	
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<210> 14284
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<220>
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 <222> (122).. (2350)

<400> 14284

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008240" 69462960

008270" 69462960

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<210> 14285

<211> 743

<212> PRT

<213> Homo sapiens

<400> 14285

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50 55 60
Leu Asn Thr Ala Val Ala Glu Phe Phe Lys Ser Asn Gln Thr Thr Thr
65 70 75 80
Asp Asn Leu Arg Gln Thr Leu Asn Gln Leu Lys Asn Gln Val His Ser
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Ala Val Glu Glu Met Asp Gly Leu Asp Asp Val Glu Asn Ser Met Leu
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Tyr Tyr Asn Gln Ala Val Ile Leu Tyr His Leu Arg Gln Tyr Thr Glu
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Lys Phe Ala Gln Ala Val Cys Phe Leu Leu Val Asp Leu Tyr Ile Leu
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Thr Tyr Gln Ala Glu Lys Ala Leu His Leu Leu Ala Val Leu Glu Lys
165 170 175
Met Ile Ser Gln Gly Asn Asn Asn Lys Asn Gly Lys Asn Glu Thr Gly
180 185 190
Asn Asn Asn Asn Lys Asp Gly Ser Asn His Lys Ala Glu Ser Gly Ala
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Leu Ile Glu Ala Ala Lys Ser Lys Ile His Gln Tyr Lys Val Arg Ala
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Tyr Ile Gln Met Lys Ser Leu Lys Ala Cys Lys Arg Glu Ile Lys Ser
225 230 235 240
Val Met Asn Thr Ala Gly Asn Ser Ala Pro Ser Leu Phe Leu Lys Ser
245 250 255
Asn Phe Glu Tyr Leu Arg Gly Asn Tyr Arg Lys Ala Val Lys Leu Leu
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Asn Ser Ser Asn Ile Ala Glu His Pro Gly Phe Met Lys Thr Gly Glu
275 280 285
Cys Leu Arg Cys Met Phe Trp Asn Asn Leu Gly Cys Ile His Phe Ala
290 295 300
Met Ser Lys His Asn Leu Gly Ile Phe Tyr Phe Lys Lys Ala Leu Gln
305 310 315 320
Glu Asn Asp Asn Val Cys Ala Gln Leu Ser Ala Gly Ser Thr Asp Pro
325 330 335
Gly Lys Lys Phe Ser Gly Arg Pro Met Cys Thr Leu Leu Thr Asn Lys
340 345 350
Arg Tyr Glu Leu Leu Tyr Asn Cys Gly Ile Gln Leu Leu His Ile Gly
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Arg Pro Leu Ala Ala Phe Glu Cys Leu Ile Glu Ala Val Gln Val Tyr
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000220"69462960

$\langle 210 \rangle$ 14286
 $\langle 211 \rangle$ 1749
 $\langle 212 \rangle$ DNA

<213> Homo sapiens

<400> 14286

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<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (370).. (1629)

<400> 14287

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<210> 14288

<211> 420

<212> PRT

<213> Homo sapiens

<400> 14288

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          35           40           45
Gly Met Gln Glu Ile Leu Leu Ile Gly Phe Tyr Gln Pro Asp Glu Pro
          50           55           60
Leu Thr Gln Phe Leu Glu Ala Ala Gln Gln Glu Phe Asn Leu Pro Val
          65           70           75           80
Arg Tyr Leu Gln Glu Phe Ala Pro Leu Gly Thr Gly Gly Gly Leu Tyr
          85           90           95

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09629469.072800

-8032/13211-

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Ala	His	Arg	Arg	Gln	Arg	His	Pro	Phe	Leu	Leu	Leu	Gly	Thr	Thr	Ala
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			165						170					175	
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Ala	Ser	Arg	Leu	Tyr	Leu	Ser	Arg	Tyr	Gln	Asp	Thr	His	Pro	Glu	Arg
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Glu	Ser	Ile	Val	Leu	His	Gly	Ala	Thr	Leu	Gln	Glu	His	Thr	Cys	Val
			325						330					335	
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Val	Glu	Gly	Thr	Pro	Ser	Asp	Pro	Asn	Pro	Asn	Asp	Pro	Arg	Ala	Arg
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	370					375					380				
Thr	Ile	Leu	Gly	Cys	Arg	Val	Arg	Ile	Pro	Ala	Glu	Val	Leu	Ile	Leu
385					390					395					400
Asn	Ser	Ile	Val	Leu	Pro	His	Lys	Glu	Leu	Ser	Arg	Ser	Phe	Thr	Asn
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<210> 14289
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 <212> DNA
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000220"69162960

<220>

<221> CDS

<222> (1).. (1389)

<400> 14289

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2550

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<211> 463

<212> PRT

<213> Homo sapiens

<400> 14290

Met	Arg	Ala	Gly	Pro	Glu	Pro	Gln	Ala	Leu	Val	Gly	Gln	Lys	Arg	Gly	1	5	10	15
Ala	Leu	Arg	Leu	Leu	Val	Pro	Arg	Leu	Val	Leu	Thr	Val	Ser	Ala	Pro	20	25	30	
Ala	Glu	Val	Arg	Arg	Arg	Val	Leu	Arg	Pro	Val	Leu	Ser	Trp	Met	Asp	35	40	45	
Arg	Glu	Thr	Arg	Ala	Leu	Ala	Asp	Ser	His	Phe	Arg	Gly	Leu	Gly	Val	50	55	60	
Asp	Val	Pro	Gly	Val	Gly	Gln	Ala	Pro	Gly	Arg	Val	Ala	Phe	Val	Ser	65	70	75	80
Glu	Pro	Gly	Ala	Phe	Ser	Tyr	Ala	Asp	Phe	Val	Arg	Gly	Phe	Leu	Leu	85	90	95	
Pro	Asn	Leu	Pro	Cys	Val	Phe	Ser	Ser	Ala	Phe	Thr	Gln	Gly	Trp	Gly	100	105	110	
Ser	Arg	Arg	Arg	Trp	Val	Thr	Pro	Ala	Gly	Arg	Pro	Asp	Phe	Asp	His	115	120	125	
Leu	Leu	Arg	Thr	Tyr	Gly	Asp	Val	Val	Val	Pro	Val	Ala	Asn	Cys	Gly	130	135	140	
Val	Gln	Glu	Tyr	Asn	Ser	Asn	Pro	Lys	Glu	His	Met	Thr	Leu	Arg	Asp	145	150	155	160
Tyr	Ile	Thr	Tyr	Trp	Lys	Glu	Tyr	Ile	Gln	Ala	Gly	Tyr	Ser	Ser	Pro	165	170	175	
Arg	Gly	Cys	Leu	Tyr	Leu	Lys	Asp	Trp	His	Leu	Cys	Arg	Asp	Phe	Pro	180	185	190	
Val	Glu	Asp	Val	Phe	Thr	Leu	Pro	Val	Tyr	Phe	Ser	Ser	Asp	Trp	Leu	195	200	205	
Asn	Glu	Phe	Trp	Asp	Ala	Leu	Asp	Val	Asp	Asp	Tyr	Arg	Phe	Val	Tyr	210	215	220	
Ala	Gly	Pro	Ala	Gly	Ser	Trp	Ser	Pro	Phe	His	Ala	Asp	Ile	Phe	Arg	225	230	235	240
Ser	Phe	Ser	Trp	Ser	Val	Asn	Val	Cys	Gly	Arg	Lys	Lys	Trp	Leu	Leu	245	250	255	
Phe	Pro	Pro	Gly	Gln	Glu	Glu	Ala	Leu	Arg	Asp	Arg	His	Gly	Asn	Leu	260	265	270	
Pro	Tyr	Asp	Val	Thr	Ser	Pro	Ala	Leu	Cys	Asp	Thr	His	Leu	His	Pro	275	280	285	
Arg	Asn	Gln	Leu	Ala	Gly	Pro	Pro	Leu	Glu	Ile	Thr	Gln	Glu	Ala	Gly	290	295	300	
Glu	Met	Val	Phe	Val	Pro	Ser	Gly	Trp	His	His	Gln	Val	His	Asn	Leu				

008270" 69462960

-8035/13211-

305 310 315 320
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325 330 335
Ala Asn Met Trp Arg Phe Leu Gln Gln Glu Leu Cys Ala Val Gln Glu
340 345 350
Glu Val Ser Glu Trp Arg Asp Ser Met Pro Asp Trp His His His Cys
355 360 365
Gln Val Ile Met Arg Ser Cys Ser Gly Ile Asn Phe Glu Glu Phe Tyr
370 375 380
His Phe Leu Lys Val Ile Ala Glu Lys Arg Leu Val Leu Arg Glu
385 390 395 400
Ala Ala Ala Glu Asp Gly Ala Gly Leu Gly Phe Glu Gln Ala Ala Phe
405 410 415
Asp Val Gly Arg Ile Thr Glu Val Leu Ala Ser Leu Val Ala His Pro
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<212> DNA
<213> Homo sapiens

<220>
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<222> (6).. (485)

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008220" 69462960

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<210> 14292
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 <212> PRT
 <213> Homo sapiens

<400> 14292

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			20					25					30		
Leu	Gly	Ala	Leu	Leu	Phe	Leu	Asn	Phe	Ile	Arg	Phe	Leu	Glu	Ser	His
		35					40					45			
Trp	Phe	Val	Trp	Val	Thr	Gln	Met	Asn	His	Ile	Val	Met	Glu	Ile	Asp
	50					55					60				
Gln	Glu	Ala	Tyr	Arg	Asp	Trp	Phe	Ser	Ser	Gln	Leu	Thr	Ala	Thr	Cys
	65				70					75					80
Asn	Val	Glu	Gln	Ser	Phe	Phe	Asn	Asp	Trp	Phe	Ser	Gly	His	Leu	Asn
				85					90					95	
Phe	Gln	Ile	Glu	His	His	Leu	Phe	Pro	Thr	Met	Pro	Arg	His	Asn	Leu
		100						105					110		
His	Lys	Ile	Ala	Pro	Leu	Val	Lys	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile
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Glu	Tyr	Gln	Glu	Lys	Pro	Leu	Leu	Arg	Ala	Leu	Leu	Asp	Ile	Ile	Arg
	130					135						140			
Ser	Leu	Lys	Lys	Ser	Gly	Lys	Leu	Trp	Leu	Asp	Ala	Tyr	Leu	His	Lys
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008240" 69162960

<210> 14293
 <211> 2354
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (8).. (2353)

<400> 14293

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-8038/13211-

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<211> 782

<212> PRT

<213> Homo sapiens

<400> 14294

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		20					25					30		
Cys	Val	Ser	Gly	Asp	Phe	Val	Lys	Val	Tyr	Ser	Thr	Val	Thr	Glu
		35					40				45			
Cys	Val	His	Ile	Leu	His	Gly	His	Arg	Asn	Leu	Val	Thr	Gly	Ile
	50					55				60				Gln
Leu	Asn	Pro	Asn	Asn	His	Leu	Gln	Leu	Tyr	Ser	Cys	Ser	Leu	Asp
	65				70					75				80
Thr	Ile	Lys	Leu	Trp	Asp	Tyr	Ile	Asp	Gly	Ile	Leu	Ile	Lys	Thr
			85						90					95
Ile	Val	Gly	Cys	Lys	Leu	His	Ala	Leu	Phe	Thr	Leu	Ala	Gln	Ala
			100					105					110	Glu
Asp	Ser	Val	Phe	Val	Ile	Val	Asn	Lys	Glu	Lys	Pro	Asn	Ile	Phe
		115					120					125		Gln
Leu	Val	Ser	Val	Lys	Leu	Pro	Lys	Ser	Ser	Ser	Gln	Glu	Val	Glu
	130					135					140			Ala
Lys	Glu	Leu	Ser	Phe	Val	Leu	Asp	Tyr	Ile	Asn	Gln	Ser	Pro	Lys
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Ile	Ala	Phe	Gly	Asn	Glu	Gly	Val	Tyr	Val	Ala	Ala	Val	Arg	Glu
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Tyr	Leu	Ser	Val	Tyr	Phe	Phe	Lys	Lys	Lys	Thr	Thr	Ser	Arg	Phe
		180						185					190	Thr
Leu	Ser	Ser	Ser	Arg	Asn	Lys	Lys	His	Ala	Lys	Asn	Asn	Phe	Thr
		195				200						205		Cys
Val	Ala	Cys	His	Pro	Thr	Glu	Asp	Cys	Ile	Ala	Ser	Gly	His	Met
	210					215					220			Asp
Gly	Lys	Ile	Arg	Leu	Trp	Arg	Asn	Phe	Tyr	Asp	Asp	Lys	Lys	Tyr
	225				230					235				240
Tyr	Thr	Cys	Leu	His	Trp	His	His	Asp	Thr	Val	Met	Asp	Leu	Ala
			245						250					255
Ser	Val	Thr	Gly	Thr	Ser	Leu	Leu	Ser	Gly	Gly	Arg	Glu	Ser	Val
		260						265					270	Leu
Val	Glu	Trp	Arg	Asp	Ala	Thr	Glu	Lys	Asn	Lys	Glu	Phe	Leu	Pro
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Leu	Gly	Ala	Thr	Ile	Glu	His	Ile	Ser	Val	Ser	Pro	Ala	Gly	Asp

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Leu Glu Ala Ser Ala Val Ile Gln Gly Leu Val Lys Asp Arg Ser Ile				
		325		330
Phe Thr Gly Leu Met Ile Asp Pro Arg Thr Lys Ala Leu Val Leu Asn				
		340		345
Gly Lys Pro Gly His Leu Gln Phe Tyr Ser Leu Gln Ser Asp Lys Gln				
		355		360
Leu Tyr Asn Leu Asp Ile Ile Gln Gln Glu Tyr Ile Asn Asp Tyr Gly				
		370		375
Leu Ile Gln Ile Glu Leu Thr Lys Thr Ala Phe Gly Cys Phe Gly Asn				
385		390		395
Trp Leu Ala Thr Val Glu Gln Arg Gln Glu Lys Glu Thr Glu Leu Glu				
		405		410
Leu Gln Met Lys Leu Trp Met Tyr Asn Lys Lys Thr Gln Gly Phe Ile				
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Leu Asn Thr Lys Ile Asn Met Pro His Glu Asp Cys Ile Thr Ala Leu				
		435		440
Cys Phe Cys Asn Ala Glu Lys Ser Glu Gln Pro Thr Leu Val Thr Ala				
		450		455
Ser Lys Asp Gly Tyr Phe Lys Val Trp Ile Leu Thr Asp Asp Ser Asp				
465		470		475
Ile Tyr Lys Lys Ala Val Gly Trp Thr Cys Asp Phe Val Gly Ser Tyr				
		485		490
His Lys Tyr Gln Ala Thr Asn Cys Cys Phe Ser Glu Asp Gly Ser Leu				
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Leu Ala Val Ser Phe Glu Glu Ile Val Thr Ile Trp Asp Ser Val Thr				
		515		520
Trp Glu Leu Lys Cys Thr Phe Cys Gln Arg Ala Gly Lys Ile Arg His				
		530		535
Leu Cys Phe Gly Arg Leu Thr Cys Ser Lys Tyr Leu Leu Gly Ala Thr				
545		550		555
Glu Asn Gly Ile Leu Cys Cys Trp Asn Leu Leu Ser Cys Ala Leu Glu				
		565		570
Trp Asn Ala Lys Leu Asn Val Arg Val Met Glu Pro Asp Pro Asn Ser				
		580		585
Glu Asn Ile Ala Ala Ile Ser Gln Ser Ser Val Gly Ser Asp Leu Phe				
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Val Phe Lys Pro Ser Glu Pro Arg Pro Leu Tyr Ile Gln Lys Gly Ile				
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Glu Ser Phe Thr Ser Glu Ala Tyr Gln Trp Leu Asn Arg Ser Gln Phe				
		645		650
Tyr Phe Leu Thr Lys Ser Gln Ser Leu Leu Thr Phe Ser Thr Lys Ser				
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Pro Glu Glu Lys Leu Thr Pro Thr Ser Lys Gln Leu Leu Ala Glu Glu				

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Gln Gln Asp Glu Lys Leu Asn Glu Thr Leu Glu Asn Glu Leu Val Gln		
705	710	715
Leu Pro Leu Thr Glu Asn Ile Pro Ala Ile Ser Glu Leu Leu His Thr		
725	730	735
Pro Ala His Val Leu Pro Ser Ala Ala Phe Leu Cys Ser Met Phe Val		
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Glu Asp Val Asp Met Glu Glu Lys Glu Ser Glu Asp Ser		
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<210> 14295
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 <212> DNA
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<220>
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<400> 14295

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<400> 14296

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Thr Ile Ala Asn Trp Glu Arg Glu Phe Arg Thr Trp Thr Asp Ile Asn
             35             40             45
Val Val Val Tyr His Gly Ser Leu Ile Ser Arg Gln Met Ile Gln Gln
             50             55             60
Tyr Glu Met Tyr Phe Arg Asp Ser Gln Gly Arg Ile Ile Arg Gly Ala
             65             70             75             80
Tyr Arg Phe Gln Ala Ile Ile Thr Thr Phe Glu Met Ile Leu Gly Gly
             85             90             95
Cys Gly Glu Leu Asn Ala Ile Glu Trp Arg Cys Val Ile Ile Asp Glu
             100            105            110
Ala His Arg Leu Lys Asn Lys Asn Cys Lys Leu Leu Glu Gly Leu Lys
             115            120            125
Leu Met Asn Leu Glu His Lys Val Leu Leu Thr Gly Thr Pro Leu Gln
             130            135            140
Asn Thr Val Glu Glu Leu Phe Ser Leu Leu His Phe Leu Glu Pro Leu
             145            150            155            160
Arg Phe Pro Ser Glu Ser Thr Phe Met Gln Glu Phe Gly Asp Leu Lys
             165            170            175
Thr Glu Glu Gln Val Gln Lys Leu Gln Val Ile Leu Lys Pro Met Met
             180            185            190
Leu Arg Arg Leu Lys Glu Asp Val Glu Lys Lys Leu Ala Pro Lys Glu
             195            200            205

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09629469.072800

-8042/13211-

Glu Thr Ile Ile Glu Val Glu Leu Thr Asn Ile Gln Lys Lys Tyr Tyr
210 215 220
Arg Ala Ile Leu Glu Lys Asn Phe Ser Phe Leu Ser Lys Gly Ala Gly
225 230 235 240
Gln Thr Asn Val Pro Asn Leu Val Asn Thr Met Met Glu Leu Arg Lys
245 250 255
Cys Cys Asn His Pro Tyr Leu Ile Lys Gly Ala Glu Glu Lys Ile Leu
260 265 270
Gly Glu Phe Arg Asp Thr Tyr Asn Pro Ala Ala Ser Asp Phe His Leu
275 280 285
Gln Ala Met Ile Gln Ser Ala Gly Lys Leu Val Leu Ile Asp Lys Leu
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Leu Pro Lys Met Lys Ala Gly Gly His Lys Val Leu Ile Phe Ser Gln
305 310 315 320
Met Val Arg Cys Leu Asp Ile Leu Glu Asp Tyr Leu Ile His Lys Arg
325 330 335
Tyr Leu Tyr Glu Arg Ile Asp Gly Arg Val Arg Gly Asn Leu Arg Gln
340 345 350
Ala Ala Ile Asp Arg Phe Ser Lys Pro Asp Ser Asp Arg Phe Val Phe
355 360 365
Leu Leu Cys Thr Arg Ala Gly Gly Leu Gly Ile Asn Leu Thr Ala Ala
370 375 380
Asp Thr Cys Ile Ile Phe Asp Ser Asp Trp Asn Pro Gln Asn Asp Leu
385 390 395 400
Gln Ala Gln Ala Arg Cys His Arg Ile Gly Gln Asn Lys Ala Val Lys
405 410 415
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Arg Ala Ser Leu Lys Leu Gly Leu Asp Lys Ala Val Leu Gln Ser Met
435 440 445
Ser Gly Arg Glu Ser Asn Val Gly Gly Ile Gln Gln Leu Ser Lys Lys
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Glu Ile Glu Asp Leu Leu Arg Arg Gly Ala Tyr Gly Ala Ile Met Glu
465 470 475 480
Glu Glu Asp Glu Gly Ser Lys Phe Cys Glu Glu Asp Ile Asp Gln Ile
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Leu Leu Arg Arg Thr Lys Thr Ile Thr Ile Glu Ser Glu Gly Arg Gly
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Ser Thr Phe Ala Lys Ala Ser Phe Val Ala Ser Gly Asn Arg Thr Asp
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Ile Ser Leu Asp Asp Pro Asn Phe Trp Gln Lys Trp Ala Lys Lys Ala
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Glu Ile Asp Ile Glu Ala Ile Ser Gly Arg Asn Gly Leu Val Ile Asp
545 550 555 560
Thr Pro Arg Ile Arg Lys Gln Thr Arg Pro Phe Ser Ala Thr Lys Asp
565 570 575
Glu Leu Ala Glu Leu Ser Glu Ala Glu Ser Glu Gly Asp Glu Lys Pro
580 585 590

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Lys Leu Arg Arg Pro Cys Asp Arg Ser Asn Gly Tyr Gly Arg Thr Glu
595 600 605
Cys Phe Arg Val Glu Lys Asn Leu Leu Val Tyr Gly Trp Gly Arg Trp
610 615 620
Arg Glu Ile Leu Ser His Gly Arg Phe Lys Arg Gln Leu Asn Glu His
625 630 635 640
Asp Val Glu Ile Ile Cys Arg Ala Leu Leu Ala Tyr Cys Leu Val His
645 650 655
Tyr Arg Gly Asp Glu Lys Ile Lys Gly Phe Ile Trp Asp Leu Ile Thr
660 665 670
Pro Thr Glu Asp Gly Gln Thr Arg Glu Leu Gln Asn His Leu Gly Leu
675 680 685
Ser Ala Pro Val Pro Arg Gly Arg Lys Gly Lys Lys Val Lys Thr Gln
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Pro Glu Gln Leu Leu Gln Asp Glu Gly Tyr
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<210> 14297
<211> 2438
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (82).. (1026)

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tatgacttat ttgttggcag ccaggccaca gattttgggg aggccttagt acggcatgat 1020
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tattatgtat taacatggcg tgtttatttt tgtatttttc tctggttggg agtatgatat 1320
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<210> 14298
 <211> 315
 <212> PRT
 <213> Homo sapiens

<400> 14298

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			20					25					30		
Gln	Leu	Ser	Asp	Lys	Val	His	Asn	Asp	Ala	Gln	Ser	Phe	Asp	Tyr	Asp
		35					40					45			
His	Asp	Ala	Phe	Leu	Gly	Ala	Glu	Glu	Ala	Lys	Thr	Phe	Asp	Gln	Leu
	50					55					60				
Thr	Pro	Glu	Glu	Ser	Lys	Glu	Arg	Leu	Gly	Met	Ile	Val	Asp	Lys	Ile
	65				70					75				80	
Asp	Ala	Asp	Lys	Asp	Gly	Phe	Val	Thr	Glu	Gly	Glu	Leu	Lys	Ser	Trp
			85						90					95	
Ile	Lys	His	Ala	Gln	Lys	Lys	Tyr	Ile	Tyr	Asp	Asn	Val	Glu	Asn	Gln
			100					105					110		
Trp	Gln	Glu	Phe	Asp	Met	Asn	Gln	Asp	Gly	Leu	Ile	Ser	Trp	Asp	Glu
		115					120					125			
Tyr	Arg	Asn	Val	Thr	Tyr	Gly	Thr	Tyr	Leu	Asp	Asp	Pro	Asp	Pro	Asp

008220"69462960

130	135	140
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Lys Met Ala Asp Lys Asp Gly Asp Leu Ile Ala Thr Lys Glu Glu Phe		160
	165	170
Thr Ala Phe Leu His Pro Glu Glu Tyr Asp Tyr Met Lys Asp Ile Val		175
	180	185
Val Gln Glu Thr Met Glu Asp Ile Asp Lys Asn Ala Asp Gly Phe Ile		190
	195	200
Asp Leu Glu Glu Tyr Ile Gly Asp Met Tyr Ser His Asp Gly Asn Thr		205
	210	215
Asp Glu Pro Glu Trp Val Lys Thr Glu Arg Glu Gln Phe Val Glu Phe		220
225	230	235
Arg Asp Lys Asn Arg Asp Gly Lys Met Asp Lys Glu Glu Thr Lys Asp		240
	245	250
Trp Ile Leu Pro Ser Asp Tyr Asp His Ala Glu Ala Glu Ala Arg His		255
	260	265
Leu Val Tyr Glu Ser Asp Gln Asn Lys Asp Gly Lys Leu Thr Lys Glu		270
	275	280
Glu Ile Val Asp Lys Tyr Asp Leu Phe Val Gly Ser Gln Ala Thr Asp		285
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Phe Gly Glu Ala Leu Val Arg His Asp Glu Phe		300
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<210> 14299
 <211> 2196
 <212> DNA
 <213> Homo sapiens

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 caagtaaaag gaaacagggt aaattcattt taacatgttt tacttaaccc aatgtatcca 180
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 gctttgttgc ccaggctgga gtgcagtggc acaatctcgg ctactgcaa cctccacctt 300
 ccaggttcaa gtgattctcc tgccctagcc tcccagtag ctgggattac aggcacccgc 360
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 accatggtac atttttatct gaaatgcttg acctttattt tgatttcata aaattcatag 660
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<210> 14300
 <211> 2395
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (363).. (1625)

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00629469.072800

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<210> 14301
 <211> 421
 <212> PRT
 <213> Homo sapiens

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<400> 14301
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Lys Leu Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser Phe Pro His
          35          40          45
Asp Val Gln Phe Phe Asp Leu Arg Leu Leu Phe Leu Leu Thr Ala Leu
          50          55          60
Arg Thr Asp Val Arg Gln Gln Leu Phe Gln Glu Leu Lys Gly Val Arg
          65          70          75          80
Leu Leu Thr Asp Thr Leu Glu Leu Thr Leu Gly Val Thr Pro Glu Gly
          85          90          95
Asn Pro Pro Pro Thr Leu Leu Pro Ser Gln Glu Thr Glu Arg Ala Met
          100          105          110
Glu Ile Leu Lys Val Leu Phe Asn Ile Thr Leu Asp Ser Ile Lys Gly
          115          120          125

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-8048/13211-

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145					150					155					160
Phe	His	Gly	His	Ala	Val	Asn	Leu	Leu	Gly	Asn	Leu	Pro	Leu	Lys	Cys
				165					170					175	
Leu	Asp	Val	Leu	Leu	Thr	Leu	Glu	Pro	His	Gly	Asp	Ser	Thr	Glu	Phe
			180					185					190		
Met	Gly	Val	Asn	Met	Asp	Val	Ile	Arg	Ala	Leu	Leu	Ile	Phe	Leu	Glu
	195						200					205			
Lys	Arg	Leu	His	Lys	Thr	His	Arg	Leu	Lys	Glu	Ser	Val	Ala	Pro	Val
210					215						220				
Leu	Ser	Val	Leu	Thr	Glu	Cys	Ala	Arg	Met	His	Arg	Pro	Ala	Arg	Lys
225					230					235					240
Phe	Leu	Lys	Ala	Gln	Val	Leu	Pro	Pro	Leu	Arg	Asp	Val	Arg	Thr	Arg
			245						250					255	
Pro	Glu	Val	Gly	Glu	Met	Leu	Arg	Asn	Lys	Leu	Val	Arg	Leu	Met	Thr
			260					265					270		
His	Leu	Asp	Thr	Asp	Val	Lys	Arg	Val	Ala	Ala	Glu	Phe	Leu	Phe	Val
		275				280						285			
Leu	Cys	Ser	Glu	Ser	Val	Pro	Arg	Phe	Ile	Lys	Tyr	Thr	Gly	Tyr	Gly
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Pro	Glu	Gly	Gln	Tyr	Ser	Glu	Asp	Glu	Asp	Thr	Asp	Thr	Asp	Glu	Tyr
			325						330					335	
Lys	Glu	Ala	Lys	Ala	Ser	Ile	Asn	Pro	Val	Thr	Gly	Arg	Val	Glu	Glu
			340					345					350		
Lys	Pro	Pro	Asn	Pro	Met	Glu	Gly	Met	Thr	Glu	Glu	Gln	Lys	Glu	His
		355					360					365			
Glu	Ala	Met	Lys	Leu	Val	Thr	Met	Phe	Asp	Lys	Leu	Ser	Arg	Asn	Arg
370						375					380				
Val	Ile	Gln	Pro	Met	Gly	Met	Ser	Pro	Arg	Gly	His	Leu	Thr	Ser	Leu
385					390					395					400
Gln	Asp	Ala	Met	Cys	Glu	Thr	Met	Glu	Gln	Gln	Leu	Ser	Ser	Asp	Pro
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Asp	Ser	Asp	Pro	Asp											
			420												

<210> 14302
 <211> 1598
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (239).. (1231)

000270"69462960

<400> 14302

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ttggaggtgg acacaaagga agaggcagcc agacagctac ttcagcgtcc tcaacgcatt 360
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<210> 14303

<211> 331

<212> PRT

<213> Homo sapiens

<400> 14303

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          20             25             30
Ser Tyr Phe Ser Val Leu Asn Ala Phe Ile Asp Arg Lys Asp Ser Tyr
          35             40             45
Tyr Ser Ile His Gln Ile Ala Gln Met Gly Val Gly Glu Gly Lys Ser
          50             55             60
Ile Gly Gln Trp Tyr Gly Pro Asn Thr Val Ala Gln Val Leu Lys Lys
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Leu Ala Val Phe Asp Thr Trp Ser Ser Leu Ala Val His Ile Ala Met

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008220"69462960

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Cys	Asn	Gly	Phe	Pro	Ala	Gly	Ala	Glu	Val	Thr	Asn	Arg	Pro	Ser	Pro				
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Ser	Leu	Gly	Asp	Ser	Ser	Asp	Val	Glu	Arg	Leu	Glu	Arg	Phe	Phe	Asp				
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<210> 14304

<211> 1884

<212> DNA

<213> Homo sapiens

<400> 14304

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atcttgatta aagtagtggt ttcttcattg ttctctcacc acttttccct taattctaag 480
tcattttttt attttggttac caaccatata tcttagaata taaacaggac ttgttttttt 540

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<210> 14305
 <211> 1654
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (4).. (1095)

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<400> 14305
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aaggagctgt atggcaagat cgccgaggcc ttccgcctgc caactgccga ggtgatgttc 300
tgcaccctga acaccacaa agtggacatg gacaagctcc tggggggcca gatcgggctg 360
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gccattaacg ggcagagcct gctgggctgc cggcactacg aggtggcccg gctgctcaag 600
gagctgcccc gaggccgtac cttcacgctg aagctcacgg agcctcgcaa ggccctcgac 660
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cgagggaccc tgcggctccg atcccggggc ccgccacagt ggaggatctg ccctctgcct 780

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<210> 14306
 <211> 364
 <212> PRT
 <213> Homo sapiens

<400> 14306

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			20						25				30		
Gly	Pro	Leu	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Pro	Gln	Met	Gly	Leu	Pro
			35				40					45			
Pro	Pro	Pro	Pro	Ala	Leu	Arg	Pro	Arg	Leu	Val	Phe	His	Thr	Gln	Leu
			50			55					60				
Ala	His	Gly	Ser	Pro	Thr	Gly	Arg	Ile	Glu	Gly	Phe	Thr	Asn	Val	Lys
65					70				75					80	
Glu	Leu	Tyr	Gly	Lys	Ile	Ala	Glu	Ala	Phe	Arg	Leu	Pro	Thr	Ala	Glu
				85					90					95	
Val	Met	Phe	Cys	Thr	Leu	Asn	Thr	His	Lys	Val	Asp	Met	Asp	Lys	Leu
			100				105					110			
Leu	Gly	Gly	Gln	Ile	Gly	Leu	Glu	Asp	Phe	Ile	Phe	Ala	His	Val	Lys
			115				120				125				
Gly	Gln	Arg	Lys	Glu	Val	Glu	Val	Phe	Lys	Ser	Glu	Asp	Ala	Leu	Gly
			130				135				140				
Leu	Thr	Ile	Thr	Asp	Asn	Gly	Ala	Gly	Tyr	Ala	Phe	Ile	Lys	Arg	Ile
145					150				155					160	
Lys	Glu	Gly	Ser	Val	Ile	Asp	His	Ile	His	Leu	Ile	Ser	Val	Gly	Asp
				165					170					175	
Met	Ile	Glu	Ala	Ile	Asn	Gly	Gln	Ser	Leu	Leu	Gly	Cys	Arg	His	Tyr
			180				185						190		
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<210> 14307
<211> 2058
<212> DNA
<213> Homo sapiens

$\langle 220 \rangle$
 $\langle 221 \rangle$ CDS
 $\langle 222 \rangle$ (24) .. (1088)

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gcgtggtgga	gaagctcagc	gtcctcaaga	ggaaggcggt	ggaatccatc	caggccgagg	300
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aatagttttc tattttctc                                     2058

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<210> 14308
 <211> 355
 <212> PRT
 <213> Homo sapiens

<400> 14308

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			20					25					30		
Phe	Arg	Ala	Ala	Gln	Lys	Asn	Ile	Asp	Arg	Glu	Thr	Ser	His	Val	Thr
		35				40						45			
Met	Val	Val	Ala	Glu	Leu	Glu	Lys	Thr	Leu	Ser	Gly	Cys	Pro	Ala	Val
	50				55					60					
Asp	Ser	Val	Val	Ser	Leu	Leu	Asp	Gly	Val	Val	Glu	Lys	Leu	Ser	Val
65				70				75					80		
Leu	Lys	Arg	Lys	Ala	Val	Glu	Ser	Ile	Gln	Ala	Glu	Asp	Glu	Ser	Ala
			85					90					95		
Lys	Leu	Cys	Lys	Arg	Arg	Ile	Glu	His	Leu	Lys	Glu	His	Ser	Ser	Asp
		100				105					110				
Gln	Pro	Ala	Ala	Ala	Ser	Val	Trp	Lys	Arg	Lys	Arg	Met	Asp	Arg	Met
	115					120					125				
Met	Val	Glu	His	Leu	Leu	Arg	Cys	Gly	Tyr	Tyr	Asn	Thr	Ala	Val	Lys
	130				135						140				
Leu	Ala	Arg	Gln	Ser	Gly	Ile	Glu	Ser	Cys	Leu	Glu	Phe	Ser	Leu	Arg
145					150					155					160

008220" 69462960

Ile Gln Glu Phe Ile Glu Leu Ile Arg Gln Asn Lys Arg Leu Asp Ala
165 170 175
Val Arg His Ala Arg Lys His Phe Ser Gln Ala Glu Gly Ser Gln Leu
180 185 190
Asp Glu Val Arg Gln Ala Met Gly Met Leu Ala Phe Pro Pro Asp Thr
195 200 205
His Ile Ser Pro Tyr Lys Asp Leu Leu Asp Pro Ala Arg Trp Arg Met
210 215 220
Leu Ile Gln Gln Phe Arg Tyr Asp Asn Tyr Arg Leu His Gln Leu Gly
225 230 235 240
Asn Asn Ser Val Phe Thr Leu Thr Leu Gln Ala Gly Leu Ser Ala Ile
245 250 255
Lys Thr Pro Gln Cys Tyr Lys Glu Asp Gly Ser Ser Lys Ser Pro Asp
260 265 270
Cys Pro Val Cys Ser Arg Ser Leu Asn Lys Leu Ala Gln Pro Leu Pro
275 280 285
Met Ala His Cys Ala Asn Ser Arg Leu Val Cys Lys Ile Ser Gly Asp
290 295 300
Val Met Asn Glu Asn Asn Pro Pro Met Met Leu Pro Asn Gly Tyr Val
305 310 315 320
Tyr Gly Tyr Asn Ser Leu Leu Ser Ile Arg Gln Asp Asp Lys Val Val
325 330 335
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340 345 350
Tyr Ile Met
355

<210> 14309
<211> 2005
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (137).. (844)

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000220" 09629459 072800

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<210> 14310
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 14310

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His	His	Ile	Leu	Glu	Ile	Leu	Val	Ser	Cys	Met	Pro	Phe	Ile	Lys	Ser
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Pro Thr Ala Val Lys Asn Leu Tyr Gln Ser Glu Lys Pro Gln Lys Trp
165 170 175
Arg Val Glu Ile Tyr Ser Gly Gln Lys Lys Ile Lys Thr Val Trp Gln
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Leu Ser Asp Ser Ser Pro Ile Asp His Leu Asn Phe His Lys Pro Asp
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 <213> Homo sapiens

<400> 14312

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Leu	Gln	Arg	Tyr	Ala	Leu	Asn	Arg	Ile	Thr	Val	Trp	Arg	Ser	Arg	Ser
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Thr	Leu	Phe	Ser	Thr	Lys	Leu	Trp	Glu	Gln	Ser	Gly	His	Trp	Glu	His
225					230					235					240
Tyr	Gln	Glu	Asp	Met	Phe	Ala	Val	Gln	Pro	Pro	Gly	Ser	Asp	Arg	Pro
			245						250					255	
Pro	Ser	Ser	Gln	Ser	Asp	Asp	Ser	Thr	Arg	His	Ile	Thr	Asp	Thr	Leu
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Ala	Leu	Lys	Pro	Met	Asn	Cys	Pro	Ala	His	Cys	Leu	Met	Phe	Ala	His
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Arg	Pro	Arg	Ser	Trp	Arg	Glu	Leu	Pro	Leu	Arg	Leu	Ala	Asp	Phe	Gly
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Leu	Arg	Cys	Phe	Gln	Gln	Asp	Asp	Ala	His	Ile	Phe	Cys	Thr	Thr	Asp
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Gln	Leu	Glu	Ala	Glu	Ile	Gln	Ser	Cys	Leu	Asp	Phe	Leu	Arg	Ser	Val

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Ser Gly Phe Leu Gly Asp Pro Cys Leu Trp Asp Gln Ala Glu Gln Val
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Leu Lys Gln Ala Leu Lys Glu Phe Gly Glu Pro Trp Asp Leu Asn Ser
385 390 395 400
Gly Asp Gly Ala Phe Tyr Gly Pro Lys Ile Asp Val His Leu His Asp
405 410 415
Ala Leu Gly Arg Pro His Gln Cys Gly Thr Ile Gln Leu Asp Phe Gln
420 425 430
Leu Pro Leu Arg Phe Asp Leu Gln Tyr Lys Gly Gln Ala Gly Ala Leu
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Glu Arg Pro Val Leu Ile His Arg Ala Val Leu Gly Ser Val Glu Arg
450 455 460
Leu Leu Gly Val Leu Ala Glu Ser Cys Gly Gly Lys Trp Pro Leu Trp
465 470 475 480
Leu Ser Pro Phe Gln Val Val Val Ile Pro Val Gly Ser Glu Gln Glu
485 490 495
Glu Tyr Ala Lys Glu Ala Gln Gln Ser Leu Arg Ala Ala Gly Leu Val
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Ser Asp Leu Asp Ala Asp Ser Gly Leu Thr Leu Ser Arg Arg Ile Arg
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<213> Homo sapiens

<400> 14318

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35 40 45
Gly Ala Ile Pro Pro Ala Leu His Leu Asn Pro Ala Phe Phe Pro Pro
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Pro Asn Ala Thr Val Gly Pro Pro Pro Asp Thr Tyr Met Lys Ala Ser
65 70 75 80
Ala Pro Tyr Asn His Gly Ser Arg Asp Ser Gly Pro Pro Pro Ser
85 90 95
Thr Val Ser Glu Ala Glu Phe Glu Asp Ile Met Lys Arg Asn Arg Ala
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Ile Ser Ser Ser Ala Ile Ser Lys Ala Val Ser Gly Ala Ser Ala Gly
115 120 125
Asp Tyr Ser Asp Ala Ile Glu Thr Leu Leu Thr Ala Ile Ala Val Ile
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Lys Gln Ser Arg Val Ala Asn Asp Asp Arg Cys Arg Val Leu Ile Ser
145 150 155 160
Ser Leu Lys Asp Cys Leu His Gly Ile Glu Ala Lys Ser Tyr Ser Val
165 170 175
Gly Ala Ser Gly Ser Ser Ser Arg Lys Arg His Arg Ser Arg Glu Arg
180 185 190
Ser Pro Ser Arg Ser Arg Glu Ser Ser Arg Arg His Arg Asp Leu Leu
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His Asn Glu Asp Arg His Asp Asp Tyr Phe Gln Glu Arg Asn Arg Glu
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His Glu Arg His Arg Asp Arg Glu Arg Asp Arg His His
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<210> 14319

<211> 1950

<212> DNA

<213> Homo sapiens

<220>

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<222> (216).. (1949)

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 <211> 578
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Glu Gly Asp Arg Leu Lys Glu Gly Ile Asn Ile Asn Arg Gly Leu Leu
 50 55 60
 Cys Leu Gly Asn Val Ile Ser Ala Leu Gly Asp Asp Lys Lys Gly Gly
 65 70 75 80

09629469.07800

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Asp	Ser	Asn 115	Leu	Glu	Glu	Thr	Leu	Asn 120	Thr	Leu	Arg	Tyr 125	Ala	Asp	Arg
Ala	Arg 130	Lys	Ile	Lys	Asn	Lys 135	Pro	Ile	Val	Asn	Ile 140	Asp	Pro	Gln	Thr
Ala 145	Glu	Leu	Asn	His	Leu 150	Lys	Gln	Gln	Val	Gln	Gln	Leu	Gln	Val	Leu 160
Leu	Leu	Gln	Ala	His 165	Gly	Gly	Thr	Leu	Pro 170	Gly	Ser	Ile	Thr	Val 175	Glu
Pro	Ser	Glu	Asn 180	Leu	Gln	Ser	Leu	Met 185	Glu	Lys	Asn	Gln	Ser 190	Leu	Val
Glu	Glu	Asn 195	Glu	Lys	Leu	Ser	Arg 200	Gly	Leu	Ser	Glu	Ala 205	Ala	Gly	Gln
Thr	Ala 210	Gln	Met	Leu	Glu	Arg 215	Ile	Ile	Trp	Thr	Glu	Gln	Ala	Asn	Glu
Lys 225	Met	Asn	Ala	Lys	Leu 230	Glu	Glu	Leu	Arg	Gln	His	Ala	Ala	Cys	Lys 240
Leu	Asp	Leu	Gln	Lys 245	Leu	Val	Glu	Thr	Leu	Glu	Asp	Gln	Glu	Leu 255	Lys
Glu	Asn	Val	Glu 260	Ile	Ile	Cys	Asn	Leu 265	Gln	Gln	Leu	Ile	Thr 270	Gln	Leu
Ser	Asp 275	Glu	Thr	Val	Ala	Cys	Met 280	Ala	Ala	Ala	Ile	Asp 285	Thr	Ala	Val
Glu	Gln 290	Glu	Ala	Gln	Val	Glu 295	Thr	Ser	Pro	Glu	Thr 300	Ser	Arg	Ser	Ser
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Glu	Leu	Val	Glu	Leu	Asn 325	Lys	Ala	Leu	Ala	Leu	Lys	Glu	Ala	Leu 335	Ala
Arg	Lys	Met	Thr 340	Gln	Asn	Asp	Ser	Gln 345	Leu	Gln	Pro	Ile	Gln 350	Tyr	Gln
Tyr	Gln	Asp 355	Asn	Ile	Lys	Glu	Leu 360	Glu	Leu	Glu	Val	Ile	Asn 365	Leu	Gln
Lys	Glu 370	Lys	Glu	Glu	Leu 375	Val	Leu	Glu	Leu	Gln	Thr 380	Ala	Lys	Lys	Asp
Ala 385	Asn	Gln	Ala	Lys	Leu 390	Ser	Glu	Arg	Arg	Arg	Lys	Arg	Leu	Gln	Glu 400
Leu	Glu	Gly	Gln	Ile 405	Ala	Asp	Leu	Lys	Lys	Lys	Leu	Asn	Glu	Gln	Ser 415
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Asn	Gln	Glu 435	Ile	Arg	Met	Met	Lys 440	Asn	Gln	Arg	Val	Gln	Leu	Met	Arg
Gln	Met 450	Lys	Glu	Asp	Ala 455	Glu	Lys	Phe	Arg	Gln	Trp	Lys	Gln	Lys	Lys

Asp Lys Glu Val Ile Gln Leu Lys Glu Arg Asp Arg Lys Arg Gln Tyr
 465 470 475 480
 Glu Leu Leu Lys Leu Glu Arg Asn Phe Gln Lys Gln Ser Asn Val Leu
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 Arg Arg Lys Thr Glu Glu Ala Ala Ala Ala Asn Lys Arg Leu Lys Asp
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 Ala Leu Gln Lys Gln Arg Glu Val Ala Asp Lys Arg Lys Glu Thr Gln
 515 520 525
 Ser Arg Gly Met Glu Gly Thr Ala Ala Arg Val Lys Asn Trp Leu Gly
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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Arg Lys Ala Ser Asp Pro Pro Ala Ile Gly Gly Gln Pro Gly Pro Pro
             35             40             45
Ala Lys Lys Glu Gly Ala Lys Met Pro Thr Asn Phe Val Ala Pro Thr
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Val Lys Met Ala Ala Pro Thr Ser Glu Gly Arg Pro Leu Lys Pro Gly
             65             70             75             80
Gln Tyr Val Lys Pro Asn Phe Arg Leu Thr Glu Ala Glu Ala Pro Pro
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Ser Val Ala Pro Arg Gln Ala Gln Pro Pro Gln Ser Leu Ser Leu Gly
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145 150 155 160
Leu Gly Ala Pro Glu Ala Leu Gly Gly Arg Glu Thr Gly Ser His Thr
165 170 175
Leu Gln Ser Pro Ala Pro Pro Ser Ser His Ser Leu Ala Arg Glu Arg
180 185 190
Thr Pro Leu Val Gly Lys Ala Gly Ser Ser Cys Gln Gly Pro Gly Pro
195 200 205
Arg Ser Arg Pro Leu Asp Thr Arg Arg Phe Ser Leu Ala Pro Pro Lys
210 215 220
Glu Glu Arg Leu Ala Pro Leu His Gln Ser Ala Thr Ala Pro Ala Ile
225 230 235 240
Ala Thr Ala Gly Ala Gly Ala Ala Ala Ala Gly Ser Gly Ser Asn Ser
245 250 255
Gln Leu Leu His Phe Ser Pro Ala Ala Ala Pro Ala Ala Arg Thr Lys
260 265 270
Pro Lys Ala Pro Pro Arg Ser Gly Glu Val Ala Thr Ile Thr Pro Val
275 280 285
Arg Ala Gly Leu Ser Leu Ser Glu Gly Asp Gly Val Pro Gly Gln Gly
290 295 300
Cys Ser Glu Gly Leu Pro Ala Lys Ser Pro Gly Arg Ser Pro Asp Leu
305 310 315 320
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<212> DNA
<213> Homo sapiens

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<210> 14324

<211> 107

<212> PRT

<213> Homo sapiens

<400> 14324

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His His His Pro Ala Pro Asn Thr Asn Thr Ala Pro Gln Val His Ile
          20          25          30

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Ala Asp Lys Gly Ile Cys Leu Val Arg Val Asn Pro Leu Asp Pro Gln
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 <212> PRT
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His Thr Arg Met His Arg Tyr Ala Val Arg Thr His Thr Arg Thr Gln
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Ile Cys Cys Leu Asp Thr His Thr Asp Asn Ala Ala Ser Thr Leu Thr
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His Val Gln Ile Leu Pro Gly His Thr His Val His Arg Tyr Ala Val

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<400> 14332

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<212> DNA

<213> Homo sapiens

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<211> 212

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 2345

<212> DNA

<213> Homo sapiens

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<222> (54).. (1733)

<400> 14339

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 <212> PRT
 <213> Homo sapiens

<400> 14340

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 <212> DNA
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<213> Homo sapiens

<400> 14350

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Pro	Glu	Glu	Lys	Leu	Thr	Pro	Thr	Ser	Lys	Gln	Leu	Leu	Ala	Glu	Glu
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Leu Pro Leu Thr Glu Asn Ile Pro Ala Ile Ser Glu His Leu His Thr				
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Pro Ala His Val Leu Pro Ser Ala Ala Phe Leu Cys Ser Met Phe Val				
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275 280 285
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290 295 300
Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly His Leu Leu
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Tyr Cys Phe Val Thr Leu Cys Asp Gly His Thr Phe Ser Pro Lys Leu
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370 375 380
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385 390 395 400
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Glu	Pro	Lys	Lys	Lys	Lys	Gln	Gln	Leu	Ser	Val	Cys	Asn	Lys	Leu	Cys
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	50				55					60					
Phe	Phe	Leu	Gln	Ile	Tyr	Leu	Leu	Asp	Val	Ala	Gln	Val	Gly	Pro	Phe
65				70				75						80	
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (43).. (2010)

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<210> 14356
 <211> 656
 <212> PRT
 <213> Homo sapiens

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<400> 14356
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          20             25             30
Leu Val Cys Glu Thr Ser Phe Asn Lys Lys Glu Lys Ser Glu Met Val
          35             40             45
Pro Ser Cys Pro Phe Ile Tyr Ile Ile Arg Lys Asp Val Asp Val Tyr
          50             55             60
Ser Gln Ile Leu Arg Lys Leu Phe Asn Glu Ser His Gly Ile Phe Leu
  65             70             75             80

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Gly Leu Gln Arg Ile Asp Glu Glu Leu Thr Gly Lys Ser Arg Lys Ser
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Gln Leu Val Arg Val Ser Lys Asn Tyr Arg Ser Val Ile Arg Ala Cys
100 105 110
Met Glu Glu Met His Gln Val Ala Ile Ala Ala Lys Asp Pro Ala Asn
115 120 125
Gly Arg Gln Phe Ser Ser Gln Val Ser Ile Leu Ser Ala Met Glu Leu
130 135 140
Ile Trp Asn Leu Cys Glu Ile Leu Phe Ile Glu Val Ala Pro Ala Gly
145 150 155 160
Pro Leu Leu Leu His Leu Leu Asp Trp Val Arg Leu His Val Cys Glu
165 170 175
Val Asp Ser Leu Ser Ala Asp Val Leu Gly Ser Glu Asn Pro Ser Lys
180 185 190
His Asp Ser Phe Trp Asn Leu Val Thr Ile Leu Val Leu Gln Gly Arg
195 200 205
Leu Asp Glu Ala Arg Gln Met Leu Ser Lys Glu Ala Asp Ala Ser Pro
210 215 220
Ala Ser Ala Gly Ile Cys Arg Ile Met Gly Asp Leu Met Arg Thr Met
225 230 235 240
Pro Ile Leu Ser Pro Gly Asn Thr Gln Thr Leu Thr Glu Leu Glu Leu
245 250 255
Lys Trp Gln His Trp His Glu Glu Cys Glu Arg Tyr Leu Gln Asp Ser
260 265 270
Thr Phe Ala Thr Ser Pro His Leu Glu Ser Leu Leu Lys Ile Met Leu
275 280 285
Gly Asp Glu Ala Ala Leu Leu Glu Gln Lys Glu Leu Leu Ser Asn Trp
290 295 300
Tyr His Phe Leu Val Thr Arg Leu Leu Tyr Ser Asn Pro Thr Val Lys
305 310 315 320
Pro Ile Asp Leu His Tyr Tyr Ala Gln Ser Ser Leu Asp Leu Phe Leu
325 330 335
Gly Gly Glu Ser Ser Pro Glu Pro Leu Asp Asn Ile Leu Leu Ala Ala
340 345 350
Phe Glu Phe Asp Ile His Gln Val Ile Lys Glu Cys Ser Ile Ala Leu
355 360 365
Ser Asn Trp Trp Phe Val Ala His Leu Thr Asp Leu Leu Asp His Cys
370 375 380
Lys Leu Leu Gln Ser His Asn Leu Tyr Phe Gly Ser Asn Met Arg Glu
385 390 395 400
Phe Leu Leu Leu Glu Tyr Ala Ser Gly Leu Phe Ala His Pro Ser Leu
405 410 415
Trp Gln Leu Gly Val Asp Tyr Phe Asp Tyr Cys Pro Glu Leu Gly Arg
420 425 430
Val Ser Leu Glu Leu His Ile Glu Arg Ile Pro Leu Asn Thr Glu Gln
435 440 445
Lys Ala Leu Lys Val Leu Arg Ile Cys Glu Gln Arg Gln Met Thr Glu
450 455 460

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Gln	Val	Arg	Ser	Ile	Cys	Lys	Ile	Leu	Ala	Met	Lys	Ala	Val	Arg	Asn
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Asn	Arg	Leu	Gly	Ser	Ala	Leu	Ser	Trp	Ser	Ile	Arg	Ala	Lys	Asp	Ala
				485					490						495
Ala	Phe	Ala	Thr	Pro	Val	Ser	Asp	Arg	Phe	Leu	Arg	Asp	Tyr	Cys	Glu
			500					505					510		
Arg	Gly	Cys	Phe	Ser	Asp	Leu	Asp	Leu	Ile	Asp	Asn	Leu	Gly	Pro	Ala
		515					520					525			
Met	Met	Leu	Ser	Asp	Arg	Leu	Thr	Phe	Leu	Gly	Lys	Tyr	Arg	Glu	Phe
	530						535				540				
His	Arg	Met	Tyr	Gly	Glu	Lys	Arg	Phe	Ala	Asp	Ala	Ala	Ser	Leu	Leu
545					550					555					560
Leu	Ser	Leu	Met	Thr	Ser	Arg	Ile	Ala	Pro	Arg	Ser	Phe	Trp	Met	Thr
				565					570					575	
Leu	Leu	Thr	Asp	Ala	Leu	Pro	Leu	Leu	Glu	Gln	Lys	Gln	Val	Ile	Phe
			580					585					590		
Ser	Ala	Glu	Gln	Thr	Tyr	Glu	Leu	Met	Arg	Cys	Leu	Glu	Asp	Leu	Thr
		595					600					605			
Ser	Arg	Arg	Pro	Val	His	Gly	Glu	Ser	Asp	Thr	Glu	Gln	Leu	Gln	Asp
	610					615					620				
Asp	Asp	Ile	Glu	Thr	Thr	Lys	Val	Glu	Met	Leu	Arg	Leu	Ser	Leu	Ala
625					630				635						640
Arg	Asn	Leu	Ala	Arg	Ala	Ile	Ile	Arg	Glu	Gly	Ser	Leu	Glu	Gly	Ser
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (97).. (957)

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 acattccatg ggatacatca aaacgaggac gaaccattc gtgttagcta ccatcggaat 240
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 ccatcattca aaccagggtt tgcagagcag tctctgatga agaatgccat aaaaacatcg 360
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 gccacaaatg aagccatcga ggagcagggtg gctcgggaat cctacctgca gtggttgccg 480
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 ccgcggcagc ggagttcagc ctctgtcacct gagcaccctg agctgcatgc tgaattgggc 660
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 <212> PRT
 <213> Homo sapiens

<400> 14358

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			20						25				30		
Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile	Arg	Val	Ser	Tyr	His	Arg	Asn
		35					40					45			
Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro	Asn	Lys	Ala	Thr	Ile	Gly	Val
		50				55					60				
Gly	Leu	Gly	Leu	Pro	Ser	Phe	Lys	Pro	Gly	Phe	Ala	Glu	Gln	Ser	Leu
65					70					75				80	
Met	Lys	Asn	Ala	Ile	Lys	Thr	Ser	Glu	Glu	Ser	Trp	Ile	Glu	Gln	Gln
			85						90					95	
Met	Leu	Glu	Asp	Lys	Lys	Arg	Ala	Thr	Asp	Trp	Glu	Ala	Thr	Asn	Glu
		100						105					110		
Ala	Ile	Glu	Glu	Gln	Val	Ala	Arg	Glu	Ser	Tyr	Leu	Gln	Trp	Leu	Arg
		115					120					125			
Asp	Gln	Glu	Lys	Gln	Ala	Arg	Gln	Val	Arg	Gly	Pro	Ser	Gln	Pro	Arg
130						135					140				
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145		150		155		160									
Leu	Glu	Glu	Trp	Thr	Ser	Arg	Ser	Pro	Arg	Gln	Arg	Ser	Ser	Ala	Ser
		165		170		175									
Ser	Pro	Glu	His	Pro	Glu	Leu	His	Ala	Glu	Leu	Gly	Met	Lys	Pro	Pro
		180		185		190									
Ser	Pro	Gly	Thr	Val	Leu	Ala	Leu	Ala	Lys	Pro	Pro	Ser	Pro	Cys	Ala
		195		200		205									
Pro	Gly	Thr	Ser	Ser	Gln	Phe	Ser	Ala	Gly	Ala	Asp	Arg	Ala	Thr	Ser
		210		215		220									
Pro	Leu	Val	Ser	Leu	Tyr	Pro	Ala	Leu	Glu	Cys	Arg	Ala	Leu	Ile	Gln
225				230		235									240
Gln	Met	Ser	Pro	Ser	Ala	Phe	Gly	Leu	Asn	Asp	Trp	Asp	Asp	Asp	Glu
				245		250									255
Ile	Leu	Ala	Ser	Val	Leu	Ala	Val	Ser	Gln	Gln	Glu	Tyr	Leu	Asp	Ser
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<210> 14359
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (111).. (2099)

<400> 14359

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c 2101

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<212> PRT
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Thr Ser Leu Pro Glu Ile Leu Gly Asp Ser Gln His Ala Asp Val Gly
20 25 30
Lys Glu Leu Ser Asp Leu Leu Ile Glu Asn Thr Ser Leu Thr Val Pro
35 40 45
Ile Leu Asp Val Leu Ser Ser Leu Arg Leu Asp Pro Asp Phe Leu Leu
50 55 60
Lys Val Arg Gln Leu Val Met Asp Lys Leu Ser Ser Ile Arg Leu Glu
65 70 75 80
Asp Leu Pro Val Ile Ile Lys Phe Ile Leu His Ser Val Thr Ala Met
85 90 95
Asp Thr Leu Glu Val Ile Ser Glu Leu Arg Glu Lys Leu Asp Leu Gln
100 105 110
His Cys Val Leu Pro Ser Arg Leu Gln Ala Ser Gln Val Lys Leu Lys
115 120 125
Ser Lys Gly Arg Ala Ser Ser Ser Gly Asn Gln Glu Ser Ser Gly Gln
130 135 140
Ser Cys Ile Ile Leu Leu Phe Asp Val Ile Lys Ser Ala Ile Arg Tyr
145 150 155 160
Glu Lys Thr Ile Ser Glu Ala Trp Ile Lys Ala Ile Glu Asn Thr Ala
165 170 175
Ser Val Ser Glu His Lys Val Phe Asp Leu Val Met Leu Phe Ile Ile

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565 570 575
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580 585 590
Thr Leu Asn Trp Phe Arg Glu Ile Val Asn Ala Phe Cys Gln Glu Thr
595 600 605
Ser Pro Glu Met Lys Gly Lys Val Leu Thr Arg Leu Lys His Ile Val
610 615 620
Glu Leu Gln Ile Ile Leu Glu Lys Tyr Leu Ala Val Thr Pro Asp Tyr
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His Thr Val Thr Ala Ile Ser
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<210> 14361
<211> 2483
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (6).. (1103)

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 <211> 366
 <212> PRT
 <213> Homo sapiens

<400> 14362

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<211> 1989
<212> DNA
<213> Homo sapiens

<400> 14363

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<211> 148
<212> PRT
<213> Homo sapiens

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35 40 45
Arg Arg Ser Ser Thr Ala Ser Arg Cys Ile His Asp His His Cys Gly
50 55 60
Ser Gln Ala Ser Ser Val Lys Gln Ser Arg Thr Asn Leu Ser Ser Met
65 70 75 80
Glu Leu Pro Phe Arg Asn Asp Phe Ala Gln Pro Gln Pro Met Lys Thr
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Phe Asn Ser Thr Phe Lys Lys Ser Ser Tyr Thr Phe Lys Gln Gly His
100 105 110
Glu Cys Pro Glu Gln Ala Leu Glu Asp Arg Val Met Glu Glu Ile Pro
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140

<210> 14365
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<212> DNA
<213> Homo sapiens

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<222> (74).. (1261)

<400> 14365

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<211> 396

<212> PRT

<213> Homo sapiens

<400> 14366

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			20					25					30		
Arg	Leu	Ser	Pro	Glu	Val	Ala	Pro	Pro	Ala	His	Arg	Arg	Pro	Asp	His
		35					40					45			
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	50					55				60					
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65					70					75					80
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				85					90					95	
Asn	Arg	Ser	Pro	His	His	Ser	Thr	Val	Lys	Val	Lys	Gln	Glu	Arg	Glu
			100					105					110		
Asp	His	Pro	Arg	Arg	Gly	Arg	Glu	Asp	Arg	Gln	His	Arg	Glu	Pro	Ser
		115					120					125			
Glu	Gln	Glu	His	Arg	Arg	Ala	Arg	Asn	Ser	Asp	Arg	Asp	Arg	His	Arg
	130					135					140				
Gly	His	Ser	His	Gln	Arg	Arg	Thr	Ser	Asn	Glu	Arg	Pro	Gly	Ser	Gly
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Gln	Gly	Gln	Gly	Arg	Asp	Arg	Asp	Thr	Gln	Asn	Leu	Gln	Ala	Gln	Glu
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Glu	Glu	Arg	Glu	Phe	Tyr	Asn	Ala	Arg	Arg	Arg	Glu	His	Arg	Gln	Arg
			180					185					190		
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Gly Arg Arg Val Lys Pro Tyr Ile Ile Asp Leu Gly Ser Gly Asn Gly				
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Thr Phe Leu Asn Asn Lys Arg Ile Glu Pro Gln Arg Tyr Tyr Glu Leu				
	340		345	
Lys Glu Lys Asp Val Leu Lys Phe Gly Phe Ser Ile Arg Glu Tyr Val				
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<400> 14368

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			20					25					30		
Val	Leu	Tyr	His	Cys	Thr	Leu	Cys	Gln	Glu	Val	Phe	Asp	Ser	Lys	Val
			35				40					45			
Ser	Ile	Gln	Val	His	Leu	Ala	Val	Lys	His	Ser	Asn	Glu	Lys	Lys	Met
			50			55					60				
Tyr	Arg	Cys	Thr	Ala	Cys	Asn	Trp	Asp	Phe	Arg	Lys	Glu	Ala	Asp	Leu
					70				75					80	
Gln	Val	His	Val	Lys	His	Ser	His	Leu	Gly	Asn	Pro	Ala	Lys	Ala	His
				85					90					95	
Lys	Cys	Ile	Phe	Cys	Gly	Glu	Thr	Phe	Ser	Thr	Glu	Val	Glu	Leu	Gln
			100					105					110		
Cys	His	Ile	Thr	Thr	His	Ser	Lys	Lys	Tyr	Asn	Cys	Lys	Phe	Cys	Ser
			115				120					125			
Lys	Ala	Phe	His	Ala	Ile	Ile	Leu	Leu	Glu	Lys	His	Leu	Arg	Glu	Lys
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Pro	Pro	Met	Ala	Thr	Lys	Lys	Ala	Glu	Pro	Ala	Asp	Leu	Gln	Gly	Met
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Leu	Leu	Lys	Asn	Pro	Glu	Ala	Pro	Asn	Ser	His	Glu	Ala	Ser	Glu	Asp
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Ala Gly Leu Arg Cys Pro	Glu Cys Ser Val Lys	Phe Glu Ser Ala Glu
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His Glu Cys Lys Leu Cys	Asn Gln Met Phe Asp	Ser Pro Ala Lys Leu
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Met Leu Val Pro Tyr Ile Trp Gln Asn Gln Pro Phe Asn Leu Lys Tyr
50 55 60
Lys Pro Gly Lys Gly Gly Val Pro Ala His Met Phe Gly Val Thr Lys
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Phe Gly Asp Asn Ile Glu Asp Glu Trp Phe Ile Val Tyr Val Ile Lys
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Gln Ile Thr Lys Glu Phe Pro Glu Leu Val Ala Arg Ile Glu Asp Asn
100 105 110
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115 120 125
Leu Asp Pro Glu Asn Ser Thr Asn Arg Val Phe Phe Cys His Gly Glu
130 135 140
Leu Cys Ile Ile Pro Ala Pro Arg Lys Ser Gly Ala Glu Ser Trp Leu
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165 170 175
His Ser Glu Lys Ile Leu Ala Ser Glu Ser Ile Arg Ala Ala Val Asn
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Ile Asp Leu Arg Ala Cys Arg Val Phe Lys Thr Phe Leu Pro Glu Thr
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275 280 285

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 Ser Phe Thr Thr Arg Asn Gln Val Glu Pro Val Ser Gln Thr Thr Asp
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<212> PRT

<213> Homo sapiens

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Pro Tyr Glu Cys Lys Glu Cys Gly Ile Ala Phe Thr Arg Ser Ser Gln
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Phe Arg Ile His Thr Gly Ile Lys Pro Tyr Lys Cys Lys Asp Cys Gly
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<212> DNA

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<400> 14373

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<212> PRT

<213> Homo sapiens

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-8130/13211-

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Gln Leu Gly Ala Ile Leu Val Tyr Ala Ser Leu Leu Ala Glu Lys Thr
65 70 75 80
Pro Phe Lys Thr Gln Arg Thr Leu Glu Gly Asp Ala Leu Val Gly Ser
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Leu Pro Ala Ile Leu Asn Thr Leu Leu Thr Leu Gln Glu Ala Val Asp
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Lys Tyr Phe Lys Leu Pro His Ala Ser Ser Lys Pro Pro Arg Ile Ser
      65           70           75           80
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 <212> DNA
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<400> 14377

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<213> Homo sapiens

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<210> 14385

<211> 750

<212> PRT

<213> Homo sapiens

<400> 14385

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<213> Homo sapiens

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<221> CDS

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<400> 14386

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<212> PRT
<213> Homo sapiens

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		35					40					45			
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 <213> Homo sapiens

<400> 14389

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			100					105					110		
Ser	Ser	Leu	Trp	Glu	Val	Thr	Phe	Ile	Asp	Phe	Gln	Ile	Gln	Gly	Phe
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<213> Homo sapiens

<400> 14391

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008240" 6946296

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<212> PRT

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Ser Gly Ile Ser Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val
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Trp Lys Ala Phe Ser Pro Thr Thr Ile Asn Thr Gly Arg Gly Thr Glu
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Phe Glu Gly Ala Val Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr
210 215 220
Asp Lys Val Arg Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro
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Asn Leu Met Asn Leu Ile Ala Thr Val Phe Val Phe Ala Val Val Ile
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Arg Gly Gln Tyr Ser Ser Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn
275 280 285
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Ser Gln Met Leu Ser Val Arg Phe Ser Gly Asn Phe Leu Val Asn Leu
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Ala Ile Phe Glu Asp Pro Val His Val Val Val Tyr Ile Ile Phe Met
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Val Gln Glu Thr Ser Met Leu Val Ser Leu Leu Pro Thr Ser Leu Asn
65 70 75 80
Ala Leu Arg Ala Ser Gly Val Asp Ile Glu Glu Glu Thr Glu Lys Asn
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Leu Glu Lys Val Gln Thr Ile Ile Glu His Leu Gln Glu Lys Arg Arg
100 105 110
Glu Gly Thr Leu Arg Val Asp Thr Tyr Thr Leu Val Gln Pro Glu Ala
115 120 125
Glu Asp His Val Glu Ser Tyr Arg Thr Met Pro Ile Tyr Pro Thr Tyr
130 135 140
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145 150 155 160
Ser Gly Lys Tyr Asp Ser Thr Ala Ile Tyr Leu Asp Thr His Phe Arg
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210 215 220
Ser Ser Gly Ile Val Tyr Lys Val Gln Phe Asp Thr Lys Pro Leu Lys
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385					390					395					400
Thr	Ala	Ala	Ser	Tyr	Leu	Ile	Ile	Leu	Gln	Asn	Met	Glu	Val	Pro	Ala
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 35 40 45
 Glu Thr Val Ser Pro Leu Pro Ser Ser Met Asp Leu Leu Ile Gln Asp
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 Glu Asn Ser Val Ala Lys Lys Glu Asp Lys Val Pro Val Lys Lys Gln
 85 90 95

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Lys Thr Arg Thr Val Phe Ser Ser Thr Gln Leu Cys Val Leu Asn Asp
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 130 135 140
 Asn Gln Arg Met Lys Ser Lys Arg Trp Gln Lys Asn Asn Trp Pro Lys
 145 150 155 160
 Asn Ser Asn Gly Val Thr Gln Lys Ala Ser Ala Pro Thr Tyr Pro Ser
 165 170 175
 Leu Tyr Ser Ser Tyr His Gln Gly Cys Leu Val Asn Pro Thr Gly Asn
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 225 230 235 240
 Tyr Asn Cys Gly Glu Glu Ser Leu Gln Ser Cys Met Gln Phe Gln Pro
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 260 265 270
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<400> 14418

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Asn	Gly	His	Thr	Pro	Val	Glu	Glu	Glu	Val	Gly	Gly	Ile	Pro	Val	Pro
		35				40						45			
Ala	Pro	Gly	Leu	Leu	Gln	Val	Thr	Glu	Arg	Arg	Gln	Pro	Leu	Ser	Ser
	50				55						60				
Val	Ser	Ser	Leu	Glu	Val	His	Phe	Asp	Leu	Leu	Asp	Leu	Thr	Glu	Leu
65				70				75						80	
Thr	Asp	Met	Ser	Asp	Gln	Glu	Leu	Ala	Glu	Val	Phe	Ala	Asp	Ser	Asp
			85					90					95		
Asp	Glu	Asn	Leu	Asn	Thr	Glu	Ser	Pro	Ala	Gly	Leu	His	Pro	Leu	Pro
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<213> Homo sapiens

<400> 14420

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Leu	Asn	Glu	Leu	Val	Val	Gly	Asp	Thr	Ser	Gly	Lys	Val	Ser	Val	Tyr	40	45	50	55
Lys	Asn	Asp	Asp	Ser	Arg	Pro	Trp	Leu	Thr	Cys	Ser	Cys	Gln	Gly	Met	60	65	70	75
Leu	Thr	Cys	Ala	Gly	Val	Gly	Asp	Val	Cys	Asn	Lys	Gly	Lys	Asn	Leu	80	85	90	95
Leu	Val	Ala	Val	Ser	Ala	Glu	Gly	Trp	Phe	His	Leu	Phe	Asp	Leu	Thr	100	105	110	115
Pro	Ala	Lys	Val	Leu	Asp	Ala	Ser	Gly	His	His	Glu	Thr	Leu	Ile	Gly	120	125	130	135
Glu	Glu	Gln	Arg	Pro	Val	Phe	Lys	Gln	His	Ile	Pro	Ala	Asn	Thr	Lys	140	145	150	155
Val	Met	Leu	Ile	Ser	Asp	Ile	Asp	Gly	Asp	Gly	Cys	Arg	Glu	Leu	Val	160	165	170	175
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Trp	Met	Leu	Glu	Gly	Gln	Val	Asp	Ser	Leu	Ser	Val	Thr	Leu	Gly	Pro	220	225	230	235
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Ile	Leu	Leu	Cys	Thr	Trp	Lys	Lys	Asp	Thr	Gly	Ser	Pro	Pro	Ala	Ser	260	265	270	275
Glu	Gly	Pro	Thr	Asp	Gly	Ser	Arg	Glu	Thr	Pro	Ala	Ala	Arg	Asp	Val	280	285	290	295
Val	Leu	His	Gln	Thr	Ser	Gly	Arg	Ile	His	Asn	Lys	Asn	Val	Ser	Thr	300	305	310	315
His	Leu	Ile	Gly	Asn	Ile	Lys	Gln	Gly	His	Gly	Thr	Glu	Ser	Ser	Gly	320	325	330	335
Ser	Gly	Leu	Phe	Ala	Leu	Cys	Thr	Leu	Asp	Gly	Thr	Leu	Lys	Leu	Met	340	345	350	355

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Glu Glu Val Val Ala Cys Ala Trp Asp Gly Gln Thr Tyr Ile Ile Asp		
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His Asn Arg Thr Val Val Arg Phe Gln Val Asp Glu Asn Ile Arg Ala		
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Phe Cys Ala Gly Leu Tyr Ala Cys Lys Glu Gly Arg Asn Ser Pro Cys		
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Gln Leu Glu Arg Met Glu Ser Thr Asn Leu Val Lys Leu Leu Glu Thr		
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Lys Pro Glu Tyr His Ser Leu Leu Gln Glu Leu Gly Val Asp Pro Asp		
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<400> 14421

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<212> DNA

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<212> PRT

<213> Homo sapiens

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008220"69462960

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<400> 14431

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008270" 69462960

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<400> 14432

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008270"69462960

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 Gln Leu Asn Arg Lys Tyr His Thr Thr Arg Lys Leu Ser Thr Thr Lys
 65 70 75 80
 Asp Ser Pro Gln Pro Val Glu Glu Lys Val Gly Ala Phe Thr Lys Ile
 85 90 95
 Ile Glu Ala Met Gly Phe Thr Gly Pro Leu Lys Tyr Ser Lys Trp Lys

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His	Phe	Met	Trp	Glu	Asp	Val	Gln	Gln	Arg	Gly	Arg	Val	Met	Gly	Gly
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<211> 475

<212> PRT

<213> Homo sapiens

<400> 14437

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Gln	Ala	Phe	Phe	Gly	Asp	Glu	Val	Ser	Pro	Leu	Leu	Lys	Gln	Tyr	Ile
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Val	Gly	Glu	Ile	Cys	Thr	Val	Asp	Pro	Cys	His	Lys	Phe	Thr	Trp	Cys
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 Glu Pro Lys Met Glu Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu
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 Ser Phe Thr Lys Phe Leu Gln Glu Gln Arg Met Ala Cys Glu Val Gly
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 Asp Glu Phe Ala Leu Glu Asp Phe Cys Ser Ser Leu Phe Asp Gly Phe
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 <213> Homo sapiens

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 35 40 45
 Asn Phe Phe Arg Lys Tyr Ala Pro Ser Glu Asn Gly Pro Asn Gly Ile
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<212> DNA
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<400> 14442

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Leu Pro Ala Val Ser Gly Leu Ser His Val Asp Tyr Ala Leu Ile Ala
           50           55           60
Glu Glu Thr Gly Lys Cys Phe Phe Ala Pro Asp Val Phe Asn Cys Gln
           65           70           75           80
Ala Pro Asp Thr Gly Asn Met Glu Val Leu His Leu Tyr Gly Ser Glu
           85           90           95
Glu Gln Lys Lys Gln Trp Leu Glu Pro Leu Leu Gln Gly Asn Ile Thr
           100          105          110
Ser Cys Phe Cys Met Thr Glu Pro Asp Val Ala Ser Ser Asp Ala Thr
           115          120          125
Asn Ile Glu Cys Ser Ile Gln Arg Asp Glu Asp Ser Tyr Val Ile Asn
           130          135          140
Gly Lys Lys Trp Trp Ser Ser Gly Ala Gly Asn Pro Lys Cys Lys Val
           145          150          155          160
Ala Ile Val Leu Gly Arg Thr Gln Asn Thr Ser Leu Ser Arg His Lys
           165          170          175
Gln His Ser Met Ile Leu Val Pro Met Asn Thr Pro Gly Val Lys Ile
           180          185          190
Ile Arg Pro Leu Ser Val Phe Gly Tyr Thr Asp Asn Phe His Gly Gly
           195          200          205
His Phe Glu Ile His Phe Asn Gln Val Arg Val Pro Ala Thr Asn Leu
           210          215          220
Ile Leu Gly Glu Gly Arg Gly Phe Glu Ile Ser Gln Gly Arg Leu Gly
           225          230          235          240
Pro Gly Arg Ile His His Cys Met Arg Thr Val Gly Leu Ala Glu Arg
           245          250          255
Ala Leu Gln Ile Met Cys Glu Arg Ala Thr Gln Arg Ile Ala Phe Lys
           260          265          270
Lys Lys Leu Tyr Ala His Glu Val Val Ala His Trp Ile Ala Glu Ser
           275          280          285
Arg Ile Ala Ile Glu Lys Ile Arg Leu Leu Thr Leu Lys Ala Ala His
           290          295          300
Ser Met Asp Thr Leu Gly Ser Ala Gly Ala Lys Lys Glu Ile Ala Met
           305          310          315          320
Ile Lys Val Ala Ala Pro Arg Ala Val Ser Lys Ile Val Asp Trp Ala
    
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Ile	Gln	Val	Cys	Gly	Gly	Ala	Gly	Val	Ser	Gln	Asp	Tyr	Pro	Leu	Ala				
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Asn	Met	Tyr	Ala	Ile	Thr	Arg	Val	Leu	Arg	Leu	Ala	Asp	Gly	Pro	Asp				
		355					360					365							
Glu	Val	His	Leu	Ser	Ala	Ile	Ala	Thr	Met	Glu	Leu	Arg	Asp	Gln	Ala				
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Lys	Arg	Leu	Thr	Ala	Lys	Ile													
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<210> 14443
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (233).. (1135)

<400> 14443

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<211> 301

<212> PRT

<213> Homo sapiens

<400> 14444

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			20					25					30		
Tyr	Glu	Val	Cys	Lys	Arg	Ala	Leu	Lys	Glu	Val	Ser	Lys	Leu	Val	Arg
		35					40					45			
Leu	Cys	Asn	Glu	Gly	Ala	Arg	Lys	Met	Glu	Arg	Thr	Glu	Met	Met	Tyr
	50					55					60				
Thr	Ile	Asn	Ser	Gln	Leu	Glu	Phe	Lys	Ile	Lys	Pro	Phe	Pro	Leu	Val
	65				70					75					80
Ser	Ser	Ser	Arg	Trp	Leu	Val	Lys	Arg	Gly	Glu	Leu	Thr	Ala	Tyr	Val
			85						90					95	
Glu	Asp	Thr	Val	Leu	Phe	Ser	Arg	Arg	Thr	Ser	Lys	Gln	Gln	Val	Tyr
			100					105					110		
Phe	Phe	Leu	Phe	Asn	Asp	Val	Leu	Ile	Ile	Thr	Lys	Lys	Lys	Ser	Glu
		115					120					125			
Glu	Ser	Tyr	Asn	Val	Asn	Asp	Tyr	Ser	Leu	Arg	Asp	Gln	Leu	Leu	Val
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Glu	Ser	Cys	Asp	Asn	Glu	Glu	Leu	Asn	Ser	Ser	Pro	Gly	Lys	Asn	Ser
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Ser	Thr	Met	Leu	Tyr	Ser	Arg	Gln	Ser	Ser	Ala	Ser	His	Leu	Phe	Thr
			165						170					175	
Leu	Thr	Val	Leu	Ser	Asn	His	Ala	Asn	Glu	Lys	Val	Glu	Met	Leu	Leu
			180					185					190		
Gly	Ala	Glu	Thr	Gln	Ser	Glu	Arg	Ala	Arg	Trp	Ile	Thr	Ala	Leu	Gly
		195					200					205			
His	Ser	Ser	Gly	Lys	Pro	Pro	Ala	Asp	Arg	Thr	Ser	Leu	Thr	Gln	Val
	210					215					220				
Glu	Ile	Val	Arg	Ser	Phe	Thr	Ala	Lys	Gln	Pro	Asp	Glu	Leu	Ser	Leu
225					230					235					240
Gln	Val	Ala	Asp	Val	Val	Leu	Ile	Tyr	Gln	Arg	Val	Ser	Asp	Gly	Trp

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Tyr	Glu Gly	Glu Arg Leu Arg Asp	Gly Glu Arg Gly Trp	Phe Pro Met	
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Glu Cys	Ala Lys Glu Ile Thr	Cys Gln Ala Thr	Ile Asp Lys	Asn Val	
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Glu Arg	Met Gly Arg Leu Leu Gly	Leu Glu Thr	Asn Val		
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (217).. (999)

<400> 14445

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<210> 14446
 <211> 261
 <212> PRT
 <213> Homo sapiens

<400> 14446

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			20					25					30		
Pro	Tyr	Ile	Glu	Glu	Asn	Val	Lys	Glu	Tyr	Leu	Gln	Thr	His	Trp	Glu
		35					40					45			
Glu	Glu	Glu	Cys	Gln	Gln	Asp	Val	Ser	Leu	Leu	Arg	Lys	Gln	Ala	Glu
	50					55					60				
Glu	Asp	Ala	His	Leu	Asp	Gly	Ala	Val	Pro	Ile	Pro	Ala	Ala	Ser	Gly
65					70				75						80
Asn	Gly	Val	Asp	Asp	Leu	Gln	Gln	Met	Ile	Gln	Ala	Val	Val	Asp	Asn
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Val	Cys	Trp	Gln	Met	Ser	Leu	Asp	Arg	Lys	Thr	Thr	Ala	Leu	Lys	Gln
			100					105					110		
Leu	Gln	Gly	His	Met	Trp	Arg	Ala	Ala	Phe	Thr	Ala	Gly	Arg	Met	Lys
		115					120					125			
Ala	Glu	Phe	Phe	Ala	Asp	Val	Val	Pro	Ala	Val	Arg	Lys	Trp	Arg	Glu
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Ala	Gly	Met	Lys	Val	Tyr	Ile	Tyr	Ser	Ser	Gly	Ser	Val	Glu	Ala	Gln
145					150					155					160
Lys	Leu	Leu	Phe	Gly	His	Ser	Thr	Glu	Gly	Asp	Ile	Leu	Glu	Leu	Val
			165						170					175	
Asp	Gly	His	Phe	Asp	Thr	Lys	Ile	Gly	His	Lys	Val	Glu	Ser	Glu	Ser
		180						185					190		
Tyr	Arg	Lys	Ile	Ala	Asp	Ser	Ile	Gly	Cys	Ser	Thr	Asn	Asn	Ile	Leu
		195					200					205			
Phe	Leu	Thr	Asp	Val	Thr	Arg	Glu	Ala	Ser	Ala	Ala	Glu	Glu	Ala	Asp
	210					215					220				
Val	His	Val	Ala	Val	Val	Val	Arg	Pro	Gly	Asn	Ala	Gly	Leu	Thr	Asp
225					230					235					240
Asp	Glu	Lys	Thr	Tyr	Tyr	Ser	Leu	Ile	Thr	Ser	Phe	Ser	Glu	Leu	Tyr
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (424).. (867)

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<210> 14448
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 <212> PRT
 <213> Homo sapiens

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<400> 14448

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          20           25           30
Asp Tyr Leu Arg Asn Glu Leu Pro Thr Val Ala Phe Lys Ala Arg Thr
          35           40           45
Gln His Gln Val Ser Phe Gly Ala Glu Asn Leu Met Arg Val Leu Gly
          50           55           60
Asn Tyr Cys Cys Leu Gly Glu Met Arg Thr His Ile His Met Asp Ile
          65           70           75           80
Val Gly Leu Pro Asn Ile Gly Lys Ser Ser Leu Ile Lys Ser Leu Lys
          85           90           95
His Ser His Ala Cys Ser Val Gly Ala Ile Pro Gly Val Thr Lys Phe
          100           105           110
Met Gln Glu Val Tyr Leu Asp Lys Phe Ile Arg Leu Leu Asp Ala Pro
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<212> DNA

<213> Homo sapiens

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<222> (31).. (714)

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008210 69462960

Glu Gly Thr Gln Ala Asp Ser Ala Ser His Ile Thr Asn Phe Glu Val
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Asp Gln Ser Val Phe Glu Ile Pro Glu Ser Tyr Tyr Val Gln Asp Asn
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Gly Arg Asn Val His Leu Gln Asp Glu Asp Tyr Glu Ile Met Gln Phe
115 120 125
Ala Ile Gln Gln Ser Leu Leu Glu Ser Ser Arg Ser Gln Glu Leu Ser
130 135 140
Gly Pro Ala Ser Asn Gly Gly Ile Ser Gln Thr Asn Thr Tyr Asp Ala
145 150 155 160
Gln Tyr Glu Arg Ala Ile Gln Glu Ser Leu Leu Thr Ser Thr Glu Gly
165 170 175
Leu Cys Pro Ser Ala Leu Ser Glu Thr Ser Arg Phe Asp Asn Asp Leu
180 185 190
Gln Leu Ala Met Glu Leu Ser Ala Lys Glu Leu Glu Glu Trp Glu Leu
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Leu Thr Asp Lys
225

<210> 14451
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<210> 14452
 <211> 557
 <212> PRT
 <213> Homo sapiens

<400> 14452
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 Gln Leu Tyr Leu Lys Gln Val Leu Glu Ala Phe Phe His Thr Gln Ser
 35 40 45
 Ser Val Arg His Phe Ala Leu Asn Val Ile Ala Leu Thr Leu Asn Gln
 50 55 60

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-8217/13211-

Gly	Leu	Ile	His	Pro	Val	Gln	Cys	Val	Pro	Tyr	Leu	Ile	Ala	Met	Gly
65					70					75					80
Thr	Asp	Pro	Glu	Pro	Ala	Met	Arg	Asn	Lys	Ala	Asp	Gln	Gln	Leu	Val
				85					90					95	
Glu	Ile	Asp	Lys	Lys	Tyr	Ala	Gly	Phe	Ile	His	Met	Lys	Ala	Val	Ala
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Gly	Met	Lys	Met	Ser	Tyr	Gln	Val	Gln	Gln	Ala	Ile	Asn	Thr	Cys	Leu
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Lys	Asp	Pro	Val	Arg	Gly	Phe	Arg	Gln	Asp	Glu	Ser	Ser	Ser	Ala	Leu
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145					150					155					160
Ala	Phe	Leu	Ile	Ser	Leu	Leu	Asn	Leu	Phe	Asp	Asp	Thr	Ala	Lys	Thr
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Asp	Val	Thr	Met	Leu	Leu	Tyr	Ile	Ala	Asp	Asn	Leu	Ala	Cys	Phe	Pro
			180					185					190		
Tyr	Gln	Thr	Gln	Glu	Glu	Pro	Leu	Phe	Ile	Met	His	His	Ile	Asp	Ile
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Arg	Lys	Arg	Val	Asp	Ser	Asp	Ser	Asp	Ser	Asp	Ser	Glu	Asp	Asp	Ile
			260					265					270		
Asn	Ser	Val	Met	Lys	Cys	Leu	Pro	Glu	Asn	Ser	Ala	Pro	Leu	Ile	Glu
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Phe	Ala	Asn	Val	Ser	Gln	Gly	Ile	Leu	Leu	Leu	Leu	Met	Leu	Lys	Gln
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His	Leu	Lys	Asn	Leu	Cys	Gly	Phe	Ser	Asp	Ser	Lys	Ile	Gln	Lys	Tyr
305					310					315					320
Ser	Pro	Ser	Glu	Ser	Ala	Lys	Val	Tyr	Asp	Lys	Ala	Ile	Asn	Arg	Lys
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Thr	Gly	Val	His	Phe	His	Pro	Lys	Gln	Thr	Leu	Asp	Phe	Leu	Arg	Ser
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Asp	Met	Ala	Asn	Ser	Lys	Ile	Thr	Glu	Glu	Val	Lys	Arg	Ser	Ile	Val
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Lys	Gln	Tyr	Leu	Asp	Phe	Lys	Leu	Leu	Met	Glu	His	Leu	Asp	Pro	Asp
	370					375					380				
Glu	Glu	Glu	Glu	Glu	Gly	Glu	Val	Ser	Ala	Ser	Thr	Asn	Ala	Arg	Asn
385					390					395					400
Lys	Ala	Ile	Thr	Ser	Leu	Leu	Gly	Gly	Gly	Ser	Pro	Lys	Asn	Asn	Thr
				405					410					415	
Ala	Ala	Glu	Thr	Glu	Asp	Asp	Glu	Ser	Asp	Gly	Glu	Asp	Arg	Gly	Gly
			420				425						430		
Gly	Thr	Ser	Gly	Ser	Leu	Arg	Arg	Ser	Lys	Arg	Asn	Ser	Asp	Ser	Thr
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 Ala Ile Cys Cys Pro Lys Tyr Lys Asp Arg Pro Gln Ile Ala Arg Val
 465 470 475 480
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 485 490 495
 Tyr Ser Gly Ser Trp Thr Glu Ala Lys Arg Arg Asp Gly Arg Lys Leu
 500 505 510
 Val Pro Trp Val Asp Thr Ile Lys Glu Ser Asp Ile Ile Tyr Lys Lys
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<210> 14453
 <211> 1793
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (152).. (760)

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 cagtgatgat gatgatgaag ctgaagatga tgatgaaacc gaggaactgg ggagtgatga 360
 agatgatatt gatgaagatg ggcaagaata tttggagatt ctggctaagc aggctgggtga 420
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 tgaagaacaa agaaaacagt tacaggacat agcaactctg gctgatcaaa gaagagcagc 660
 ccatgaatcc aaaatgattg agaagcatgg aggatacaaa ttcagtgtctc cagttgtgcc 720
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<212> PRT
<213> Homo sapiens

<400> 14454
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Leu Phe Asn Gly Leu Lys Arg Ala Tyr Ala Cys His Ala Glu His Glu
35 40 45
Asn Asp Ser Asp Asp Asp Asp Glu Ala Glu Asp Asp Asp Glu Thr Glu
50 55 60
Glu Leu Gly Ser Asp Glu Asp Asp Ile Asp Glu Asp Gly Gln Glu Tyr
65 70 75 80
Leu Glu Ile Leu Ala Lys Gln Ala Gly Glu Asp Gly Asp Asp Glu Asp
85 90 95
Trp Glu Glu Asp Asp Ala Glu Glu Thr Ala Leu Glu Gly Tyr Ser Thr
100 105 110
Ile Ile Asp Asp Glu Asp Asn Pro Val Asp Glu Tyr Gln Ile Phe Lys
115 120 125
Ala Ile Phe Gln Thr Ile Gln Asn Arg Asn Pro Val Trp Tyr Gln Ala
130 135 140
Leu Thr His Gly Leu Asn Glu Glu Gln Arg Lys Gln Leu Gln Asp Ile
145 150 155 160
Ala Thr Leu Ala Asp Gln Arg Arg Ala Ala His Glu Ser Lys Met Ile
165 170 175
Glu Lys His Gly Gly Tyr Lys Phe Ser Ala Pro Val Val Pro Ser Ser
180 185 190
Phe Asn Phe Gly Gly Pro Ala Pro Gly Met Asn
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<211> 1944
<212> DNA
<213> Homo sapiens

003220.69462960

<220>
<221> CDS
<222> (235).. (942)

<400> 14455

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<210> 14456
<211> 236
<212> PRT
<213> Homo sapiens

<400> 14456

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-8221/13211-

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20	25	30	
Leu Gln Val Leu Ile Glu Met Lys Asn Leu Asp Val Lys Phe Thr Lys			
35	40	45	
Asp Thr Tyr Val Leu Ala Phe Ala Ile Cys Tyr Lys Leu Asn Ser Pro			
50	55	60	
Glu Ser Phe Lys Ile Cys Thr Thr Leu Arg Glu Glu Ala Leu Leu Lys			
65	70	75	80
Gly Glu Ile Leu Ser Arg Arg Ala Ser Cys Phe Ala Val Ala Leu Ala			
85	90	95	
Leu Asn Gln Asn Glu Met Ala Lys Ala Val Ser Ile Phe Ser Gln Ile			
100	105	110	
Met Asn Pro Glu Ser Ile Ala Cys Ile Asn Leu Asn Ile Ile Ile His			
115	120	125	
Ile Gln Ser Asn Met Leu Glu Asn Leu Ile Lys Thr Leu Lys Asn Ala			
130	135	140	
Ala Glu Gly Asn Leu Ser Lys Phe Val Lys Arg His Val Phe Ser Glu			
145	150	155	160
Glu Val Leu Ala Lys Val Arg Glu Lys Val Lys Asp Val Pro Ala Leu			
165	170	175	
Val Ala Lys Phe Asp Glu Ile Tyr Gly Thr Leu His Ile Thr Gly Gln			
180	185	190	
Val Thr Thr Asp Ser Leu Asp Ala Val Leu Cys His Thr Pro Arg Asp			
195	200	205	
Arg Lys Ser His Thr Leu Leu Leu Asn Lys Arg Met Val Ser Arg Arg			
210	215	220	
Thr Phe Gln Pro Leu Ser Gln Ser Leu Leu Ala Glu			
225	230	235	

<210> 14457
 <211> 1891
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (8).. (1102)

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 ggagccaag gatgaggcac agaatgaggg cccggctaca gattcagagg ccccgctgaa 180
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cagtgcagag caggccaagc agctggtcag cagggtggtg acccagaaca tctgccagta 600
ccggagcctt cagtacagcc gccaggaggg cctggatggt ggccttcccc aggaggtgct 660
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cttgtttttt aaataaacca aagtcaaaaa c 1891

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<210> 14458
 <211> 365
 <212> PRT
 <213> Homo sapiens

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<400> 14458
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             20             25             30
Lys Glu Glu Val Val Lys Glu Pro Lys Asp Glu Ala Gln Asn Glu Gly
             35             40             45
Pro Ala Thr Glu Ser Glu Ala Pro Leu Lys Glu Asp Gly Leu Leu Pro
             50             55             60
Lys Pro Leu Ser Ser Gly Gly Glu Glu Glu Glu Lys Pro Arg Gly Glu
             65             70             75             80
Ala Ser Glu Asp Leu Cys Glu Met Ala Leu Asp Pro Glu Leu Leu Leu
             85             90             95
Leu Arg Asp Asp Gly Glu Glu Glu Phe Ala Gly Ala Lys Leu Glu Asp
             100            105            110
Ser Glu Val Arg Ser Val Ala Ser Asn Gln Ser Glu Met Glu Phe Ser

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000220" 6942950

-8223/13211-

115 120 125
Ser Leu Gln Asp Met Pro Lys Glu Leu Asp Pro Ser Ala Val Leu Pro
130 135 140
Leu Asp Cys Leu Leu Ala Phe Val Phe Phe Asp Ala Asn Trp Cys Gly
145 150 155 160
Tyr Leu His Arg Arg Asp Leu Glu Arg Ile Leu Leu Thr Leu Gly Ile
165 170 175
Arg Leu Ser Ala Glu Gln Ala Lys Gln Leu Val Ser Arg Val Val Thr
180 185 190
Gln Asn Ile Cys Gln Tyr Arg Ser Leu Gln Tyr Ser Arg Gln Glu Gly
195 200 205
Leu Asp Gly Gly Leu Pro Glu Val Leu Phe Gly Asn Leu Asp Leu
210 215 220
Leu Pro Pro Pro Gly Lys Ser Thr Lys Pro Gly Ala Ala Pro Thr Glu
225 230 235 240
His Lys Ala Leu Val Ser His Asn Gly Ser Leu Ile Asn Val Gly Ser
245 250 255
Leu Leu Gln Arg Ala Glu Gln Gln Asp Ser Gly Arg Leu Tyr Leu Glu
260 265 270
Asn Lys Ile His Thr Leu Glu Leu Lys Leu Glu Glu Ser His Asn Arg
275 280 285
Phe Ser Ala Thr Glu Val Thr Asn Lys Thr Leu Ala Ala Glu Met Gln
290 295 300
Glu Leu Arg Val Arg Leu Ala Glu Ala Glu Glu Thr Ala Arg Thr Ala
305 310 315 320
Glu Arg Gln Lys Ser Gln Leu Gln Arg Leu Leu Gln Glu Leu Arg Arg
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Arg Leu Thr Pro Leu Gln Leu Glu Ile Gln Arg Val Val Glu Lys Ala
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Asp Ser Trp Val Glu Lys Glu Glu Pro Ala Pro Ser Asn
355 360 365

<210> 14459
<211> 2200
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (173).. (1450)

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gaggggaagag ctgctgagtt tcatgggggc tgaggaggca gccctgacc cagccggagt 240
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<400> 14461

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 <222> (7).. (1707)

<400> 14465

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<210> 14466
 <211> 567
 <212> PRT
 <213> Homo sapiens

<400> 14466
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009229.072800

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	50					55					60				
Met	Val	Glu	Met	Met	Asp	Arg	Arg	Pro	Tyr	Trp	Cys	Ile	Ser	Arg	Gln
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Arg	Val	Trp	Gly	Val	Pro	Ile	Pro	Val	Phe	His	His	Lys	Thr	Lys	Asp
				85					90					95	
Glu	Tyr	Leu	Ile	Asn	Ser	Gln	Thr	Thr	Glu	His	Ile	Val	Lys	Leu	Val
			100					105					110		
Glu	Gln	His	Gly	Ser	Asp	Ile	Trp	Trp	Thr	Leu	Pro	Pro	Glu	Gln	Leu
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Tyr	Val	Pro	Gly	Gln	Asp	Ile	Leu	Asp	Ile	Trp	Phe	Asp	Ser	Gly	Thr
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Ser	Trp	Ser	Tyr	Val	Leu	Pro	Gly	Pro	Asp	Gln	Arg	Ala	Asp	Leu	Tyr
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Leu	Glu	Gly	Lys	Asp	Gln	Leu	Gly	Gly	Trp	Phe	Gln	Ser	Ser	Leu	Leu
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Thr	Ser	Val	Ala	Ala	Arg	Lys	Arg	Ala	Leu	Tyr	Lys	Thr	Val	Ile	Val
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His	Gly	Phe	Thr	Leu	Gly	Glu	Lys	Gly	Glu	Lys	Met	Ser	Lys	Ser	Leu
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Gly	Asn	Val	Ile	His	Pro	Asp	Val	Val	Val	Asn	Gly	Gly	Gln	Asp	Gln
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Ser	Lys	Glu	Pro	Pro	Tyr	Gly	Ala	Asp	Val	Leu	Arg	Trp	Trp	Val	Ala
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		275					280					285			
Leu	Gly	Asn	Val	Ala	Asp	Phe	Asn	Pro	Glu	Thr	Asp	Ser	Ile	Pro	Val
	290					295					300				
Asn	Asp	Met	Tyr	Val	Ile	Asp	Gln	Tyr	Met	Leu	His	Leu	Leu	Gln	Asp
	305				310					315					320
Leu	Ala	Asn	Lys	Ile	Thr	Glu	Leu	Tyr	Lys	Gln	Tyr	Asp	Phe	Gly	Lys
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Val	Val	Arg	Leu	Leu	Arg	Thr	Phe	Tyr	Thr	Arg	Glu	Leu	Ser	Asn	Phe
			340					345					350		
Tyr	Phe	Ser	Ile	Ile	Lys	Asp	Arg	Leu	Tyr	Cys	Glu	Lys	Glu	Asn	Asp
		355					360					365			
Pro	Lys	Arg	Arg	Ser	Cys	Gln	Thr	Ala	Leu	Val	Glu	Ile	Leu	Asp	Val
	370					375					380				
Ile	Val	Arg	Ser	Phe	Ala	Pro	Ile	Leu	Pro	His	Leu	Ala	Glu	Glu	Val
	385				390					395					400
Phe	Gln	His	Ile	Pro	Tyr	Ile	Lys	Glu	Pro	Lys	Ser	Val	Phe	Arg	Thr
				405					410					415	

009629469.072800

Gly Trp Ile Ser Thr Ser Ser Ile Trp Lys Lys Pro Gly Leu Glu Glu
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Ala Val Glu Ser Ala Cys Ala Met Arg Asp Ser Phe Leu Gly Ser Ile
435 440 445
Pro Gly Lys Asn Ala Ala Glu Tyr Lys Val Ile Thr Val Thr Glu Pro
450 455 460
Gly Leu Leu Phe Glu Ile Ile Glu Met Leu Gln Ser Glu Glu Thr Ser
465 470 475 480
Ser Thr Ser Gln Leu Asn Glu Leu Met Met Ala Ser Glu Ser Thr Leu
485 490 495
Leu Ala Gln Glu Pro Arg Glu Met Thr Ala Asp Val Ile Glu Leu Lys
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Gly Lys Phe Leu Ile Asn Leu Glu Gly Gly Asp Ile Arg Glu Glu Ser
515 520 525
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (77).. (595)

<400> 14467
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aacctatgtc ttttaaggcca aggatgagaa gaatgcagaa gaatggctcc agtgcataca 540
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aagaaaaaga gctaaattta ccaagccatg ttgtttttta ctaaatacca atggaattgt 720
tgtcctttta gaagaagggc ctaaaatggc aggtattctta gtaaattgtca tactctaaca 780
gctttagtat tgacttcaga atatatctga tgcccacaaa aataaaataa aataaaagga 840
gctacagagt atgccctcag atagtgtggg gccaggaagg gaaaagtcac tgataaaaga 900
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003270.69462960

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 <213> Homo sapiens

<400> 14468

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			20					25					30		
Thr	Ala	Gly	Ala	Trp	Gln	Cys	Phe	Met	Cys	Asn	Asn	Pro	Glu	Lys	Ala
			35					40					45		
Thr	Val	Val	Asn	Gln	Asp	Gly	Gln	Pro	Leu	Ile	Glu	Gly	Lys	Leu	Lys
			50				55				60				
Glu	Lys	Gln	Val	Arg	Trp	Lys	Phe	Ile	Lys	Arg	Trp	Lys	Thr	Arg	Tyr
					70					75					80
Phe	Thr	Leu	Ala	Gly	Asn	Gln	Leu	Leu	Phe	Gln	Lys	Gly	Lys	Ser	Lys
					85					90				95	
Asp	Asp	Pro	Asp	Asp	Cys	Pro	Ile	Glu	Leu	Ser	Lys	Val	Gln	Ser	Val
					100				105				110		
Lys	Ala	Val	Ala	Lys	Lys	Arg	Arg	Asp	Arg	Ser	Leu	Pro	Arg	Ala	Phe
					115				120				125		
Glu	Ile	Phe	Thr	Asp	Asn	Lys	Thr	Tyr	Val	Phe	Lys	Ala	Lys	Asp	Glu
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Lys	Asn	Ala	Glu	Glu	Trp	Leu	Gln	Cys	Ile	Asn	Val	Ala	Val	Ala	Gln
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Ala	Lys	Glu	Arg	Glu	Ser	Arg	Glu	Val	Thr	Thr	Tyr	Leu			
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<210> 14469
 <211> 1952
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (265).. (576)

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 tttaaacact tgtaactggt atcttgtttt gttgtgagct attaaaacac ctgaacaagt 1920
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<210> 14470

09629469-073800

<211> 104
<212> PRT
<213> Homo sapiens

<400> 14470

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			20					25					30		
Pro	Cys	Ile	Lys	Val	Val	Val	Ala	Pro	Lys	Thr	Leu	Ser	Leu	Glu	Lys
		35					40					45			
Asp	Arg	Lys	Leu	Lys	Val	Gln	Gln	Cys	Leu	Phe	Gly	Pro	Met	Phe	Ser
	50					55					60				
Met	Leu	Ser	Lys	Lys	Asn	Ala	Cys	Phe	Thr	Leu	Leu	Glu	Asn	Ser	Thr
65					70					75					80
Gly	Gln	Lys	Ser	Val	Ala	Val	Arg	Ser	Lys	Asp	Cys	Ser	Arg	Pro	Asp
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Pro	Cys	Val	Phe	His	Ser	Gly	Ser								
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<210> 14471
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (128).. (1519)

<400> 14471

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<210> 14472

<211> 464

<212> PRT

<213> Homo sapiens

<400> 14472

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Asn Leu Arg Thr Glu Ser Pro Trp Arg Ser Arg Gly Ser Val Leu Phe
  35           40           45
Cys Ser Gly Pro Gly Arg Ala Gly Arg Ala Ala Glu Pro Leu His Pro
  50           55           60
Val Cys Thr Cys Gly Arg His Phe Arg Arg Pro Asp Pro Cys Arg Glu
  65           70           75           80
Pro Leu Ala Ser Pro Ile Gln Asp Ser Val Ala Phe Glu Asp Val Ala
  85           90           95
Val Asn Phe Thr Gln Glu Glu Trp Ala Leu Leu Asp Ser Ser Gln Lys
  100          105          110
Asn Leu Tyr Arg Glu Val Met Gln Glu Thr Cys Arg Asn Leu Ala Ser
  115          120          125
Val Gly Ser Gln Trp Lys Asp Gln Asn Ile Glu Asp His Phe Glu Lys
  130          135          140
Pro Gly Lys Asp Ile Arg Asn His Ile Val Gln Arg Leu Cys Glu Ser
  145          150          155          160
Lys Glu Asp Gly Gln Tyr Gly Glu Val Val Ser Gln Ile Pro Asn Leu
  165          170          175
Asp Leu Asn Glu Asn Ile Ser Thr Gly Leu Lys Pro Cys Glu Cys Ser
  180          185          190
Ile Cys Gly Lys Val Phe Val Arg His Ser Leu Phe Asn Arg His Ile

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09629469.072800

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 <212> PRT
 <213> Homo sapiens

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<213> Homo sapiens

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35 40 45
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50 55 60
Asn Leu Asp Pro Ser Asp Pro Asn Phe Lys Lys Thr Lys Ala Met Glu
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Lys Ile Leu Glu Glu Lys Ala Arg Gln Arg Glu Arg Lys Glu Gln Glu
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 <212> PRT
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 Glu Ser Thr Lys Pro Pro Ile Thr Phe Asp Lys Leu Thr Phe Ile Pro
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 Ser Gln Pro Phe Leu Thr Ala Leu Ile Gln Ile Phe Pro Ala Leu Tyr
 65 70 75 80

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Glu	Ala	Val	Leu	Thr	Ala	Leu	Asp	Val	Leu	Gln	Lys	Ala	Ile	Cys	Val
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Ile	Phe	Val	Leu	Lys	Ala	Val	Ser	Thr	Leu	Ile	Asp	Ser	Leu	Lys	Lys
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Ser	Asn	Ser	Ala	Ser	Leu	Gln	Gly	Ile	Asp	Ser	Gln	Cys	Val	Asn	Gln
				245					250					255	
Pro	Glu	Gln	Leu	Val	Ser	Ser	Ala	Pro	Thr	Leu	Ser	Ala	Pro	Glu	Lys
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<212> PRT

<213> Homo sapiens

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Gln	Thr	Glu	Thr	Thr	Glu	Glu	Asp	Ser	Val	Leu	Leu	Met	His	Thr	Leu
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Thr	Asn	Lys	Pro	Lys	Ile	Thr	Trp	Gln	Ala	Leu	Asn	Leu	Pro	Val	Ile
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Lys	Lys	Ala	Ala	Asn	Lys	Ala	Ile	Ala	Ser	Ala	Thr	Glu	Val	Ser	Leu
	210					215					220				
Ala	Ala	Thr	Ala	Thr	His	Thr	Ala	Thr	Thr	Gln	Gly	Gln	Ile	Thr	Asn
225					230					235					240
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35 40 45
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Gln Leu Leu Asn Leu Phe Ala Tyr Gly Thr Tyr Pro Asp Tyr Ile Ala
65 70 75 80
Asn Lys Glu Ser Leu Pro Glu Leu Ser Thr Ala Gln Gln Asn Lys Leu
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Lys His Leu Thr Ile Val Ser Leu Ala Ser Arg Met Lys Cys Ile Pro
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<400> 14486

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Leu	Arg	Glu	Val	Asn	Leu	Trp	Cys	Pro	Thr	Leu	Lys	Val	Leu	Cys	Tyr
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Ser	Ser	Ser	Asp	Asp	Arg	Ser	Leu	Phe	Arg	Arg	Leu	Lys	Leu	Asn	Tyr
	610					615					620				
Ala	Ile	Phe	Asp	Glu	Gly	His	Met	Leu	Lys	Asn	Met	Gly	Ser	Ile	Arg
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Tyr	Gln	His	Leu	Met	Thr	Ile	Asn	Ala	Asn	Asn	Arg	Leu	Leu	Leu	Thr
			645						650					655	
Gly	Thr	Pro	Val	Gln	Asn	Asn	Leu	Leu	Glu	Leu	Met	Ser	Leu	Leu	Asn
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Phe	Val	Met	Pro	His	Met	Phe	Ser	Ser	Ser	Thr	Ser	Glu	Ile	Arg	Arg
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 <213> Homo sapiens

<220>
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 <222> (1646).. (2266)

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<211> 207
<212> PRT
<213> Homo sapiens

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35 40 45
Lys Lys Val Val Ala Val His Leu His Gln Thr Val Gln Val Arg Phe
50 55 60
Pro Gly Pro Gln Leu Ala Gln Ser Leu Pro Thr Pro Thr Pro Thr Met
65 70 75 80
Pro Ser Ala Arg Ser Thr Gln Phe Leu Glu Gly Trp Gly Leu Arg Val
85 90 95
Ser Pro Pro His Leu Thr Leu Ala Ser Ser Thr Val Gly Thr Pro Gly
100 105 110
Gly Val Ser Ala Arg Met Arg Val Pro Asp Gln Thr Gly Arg Arg Pro
115 120 125
Gly Arg Ala Arg Ala Gly Trp Gly Tyr Ala Leu Ala Tyr Glu Pro Thr
130 135 140
Arg Leu Cys Pro Ser Gly Ile Glu Met Ala Arg Val Gly Gln Ala Gly
145 150 155 160
Ala Leu Arg Ala Leu Gly Ala Ala Arg Asp Ser Leu Glu Leu Pro Gly
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195 200 205

<210> 14489
<211> 2420
<212> DNA
<213> Homo sapiens

<220>
<221> CDS

09629459.072800

<222> (257).. (814)

<400> 14489

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<211> 186

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<212> PRT
<213> Homo sapiens

<400> 14490

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Asp Pro Gln Gly Glu Val Ile Thr Arg Gln Gly Arg Val Glu Val Leu
      35          40          45
Asn Asp Glu Asp Cys Arg Glu Phe Pro Trp His Pro Lys Pro Val Leu
      50          55          60
Glu Leu Ser Asp Ser Asn Ala Ala Gln Leu Asn Glu Gly Pro Cys Leu
      65          70          75          80
Val Leu Phe Val Asp Ser Glu Asp Asp Gly Glu Ser Glu Ala Ala Lys
      85          90          95
Gln Leu Ile Gln Pro Ile Ala Glu Lys Ile Ile Ala Lys Tyr Lys Ala
      100          105          110
Lys Glu Glu Glu Ala Pro Leu Leu Phe Phe Val Ala Gly Glu Asp Asp
      115          120          125
Met Thr Asp Ser Leu Arg Asp Tyr Thr Asn Leu Pro Glu Ala Ala Pro
      130          135          140
Leu Leu Thr Ile Leu Asp Met Ser Ala Arg Ala Lys Tyr Val Met Asp
      145          150          155          160
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<210> 14491
<211> 2211
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (107).. (718)

<400> 14491

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<210> 14492
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 <212> PRT
 <213> Homo sapiens

<400> 14492
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 35 40 45
 Ser Val Val Thr Thr Glu Arg Ala Lys His Phe Tyr Ser Pro Gln Asp
 50 55 60
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<210> 14493
<211> 2574
<212> DNA
<213> Homo sapiens

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<211> 503

<212> PRT

<213> Homo sapiens

<400> 14494

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<213> Homo sapiens

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          35          40          45
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Leu Tyr Lys Pro Ala Pro Thr Arg Val Gln Gly Arg Arg Leu Ser Thr
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Val Gly His Pro Gly Ser Leu Arg Leu His Arg Leu Leu Thr Leu Asp
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<400> 14497

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<212> PRT

<213> Homo sapiens

<400> 14498

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<210> 14502

<211> 229

<212> PRT

<213> Homo sapiens

<400> 14502

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                20             25             30
Lys Met Tyr Ile Ala Phe Val Phe Lys Glu Lys Lys Lys Lys Ser Ala
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 <212> DNA
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009240.6942960

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<210> 14504
 <211> 2399
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (291).. (1073)

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asp Asp Asp Thr Ile Ala Lys Val Asn Ala Ala Met Asn Gly Gln Leu
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Asn Met Glu Asp Leu Arg Glu Gln Thr His Thr Arg His Tyr Glu Leu
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Tyr Arg Arg Cys Lys Leu Glu Glu Met Gly Phe Thr Asp Val Gly Pro
130 135 140
Glu Asn Lys Pro Val Ser Val Gln Glu Thr Tyr Glu Ala Lys Arg His
145 150 155 160
Glu Phe His Gly Glu Arg Gln Arg Lys Glu Glu Glu Met Lys Gln Met
165 170 175
Phe Val Gln Arg Val Lys Glu Lys Glu Ala Ile Leu Lys Glu Ala Glu
180 185 190
Arg Glu Leu Gln Ala Lys Phe Glu His Leu Lys Arg Leu His Gln Glu
195 200 205
Glu Arg Met Lys Leu Glu Glu Lys Arg Arg Leu Leu Glu Glu Glu Ile
210 215 220
Ile Ala Phe Ser Lys Lys Lys Ala Thr Ser Glu Ile Phe His Ser Gln
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<210> 14506
<211> 1701
<212> DNA
<213> Homo sapiens

<220>
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<222> (67).. (1701)

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gccgctttga cattctttct tgggaaagat gaagatgaaa aacaggacag tgactccgaa 480
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 <211> 545
 <212> PRT
 <213> Homo sapiens

<400> 14507

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			20					25					30		
Asp	Lys	Leu	Leu	Arg	Lys	Thr	Leu	Tyr	Thr	His	Ile	Val	Thr	Asp	Ile
			35				40					45			
Lys	Asn	Ile	Asn	Ala	Lys	His	Lys	Asn	Asn	Lys	Val	Asn	Val	Val	Leu
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			65			70				75					80
Lys	Met	Ser	Leu	Asp	Val	Met	Ile	Glu	Leu	Tyr	Arg	Arg	Asn	Ile	Trp
				85					90					95	
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			100					105					110		
Val	Thr	Lys	Ile	Leu	Val	Ala	Ala	Leu	Thr	Phe	Phe	Leu	Gly	Lys	Asp
			115				120					125			
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			130			135						140			
Thr	Ala	Arg	Asp	Leu	Leu	Val	Gln	Tyr	Ala	Thr	Gly	Lys	Lys	Ser	Ser
				145		150				155					160
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				245					250					255			
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			340					345					350				
Lys	Phe	Arg	Gly	Lys	Pro	Thr	Glu	Ala	Ser	Ile	Glu	Ala	Arg	Val	Gln		
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Arg	Lys	Tyr	Ile	Glu	Ile	Asp	Ser	Asp	Glu	Glu	Pro	Arg	Gly	Glu	Leu		
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Lys	Glu	Thr	Arg	Leu	Ala	Thr	Ser	Met	Ala	Gly	Lys	Thr	Asp	Arg	Lys		
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Glu	Phe	Val	Arg	Lys	Lys	Thr	Lys	Thr	Asn	Pro	Phe	Ser	Ser	Ser	Thr		
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Asn																	

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545

<210> 14508
<211> 1922
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1302).. (1757)

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Leu Leu Gln Ala Ser Gly Leu Ala Glu Pro Pro Glu Pro Arg Pro Val
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Ser Ser Pro Ser Gly Ser Leu Asn Phe Gln Gly Ser Gln Gly Val Leu
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 Asn Gly Ala Glu Leu Ala Arg Val Arg Arg Gln Leu Asp Glu Ala Lys
 65 70 75 80
 Arg Lys Ile Arg Gln Trp Glu Glu Ser Trp Gln Gln Val Lys Gln Val
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 Val Ala Asp Ser Asp Arg Gln Leu Ala Leu Gln Lys Lys Glu Glu Val

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<210> 14516
 <211> 452
 <212> PRT
 <213> Homo sapiens

<400> 14516

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			20					25					30		
Gln	Cys	Met	Phe	Phe	Lys	Asp	Lys	Thr	Met	Leu	Cys	Pro	Met	His	Lys
		35					40				45				
Pro	Lys	Gly	Ile	His	Glu	Gln	Glu	Leu	Ser	Tyr	Phe	Ala	Val	Phe	Arg
	50					55					60				
Arg	Val	Tyr	Val	Gln	Arg	Asp	Glu	Val	Arg	Gln	Ile	Ala	Ser	Ile	Val
	65				70				75					80	
Gln	Arg	Gly	Glu	Arg	Asp	His	Thr	Phe	Arg	Val	Gly	Ser	Leu	Ile	Phe
				85				90						95	
His	Thr	Ile	Gly	Gln	Leu	Leu	Pro	Gln	Gln	Met	Gln	Ala	Phe	His	Ser
			100				105					110			
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Ser	Thr	Arg	Tyr	Ala	Asn	Arg	Arg	Cys	Arg	Tyr	Leu	Cys	Ser	Ile	Glu
	130					135					140				
Glu	Lys	Asp	Gly	Arg	Pro	Val	Phe	Val	Val	Arg	Ile	Val	Glu	Gln	Gly
	145				150					155				160	
His	Glu	Asp	Leu	Val	Leu	Ser	Asp	Ile	Ser	Pro	Lys	Gly	Val	Trp	Asp
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Val	Ser	Ala	Val	Ala	Arg	Ile	Ala	Glu	Ser	Leu	Pro	Gly	Val	Glu	Ala

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210		215		220
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Pro Leu Ala Val Asn Pro Thr Gly Cys Ala Arg Ser Glu Pro Lys Met				
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	260		265	270
Thr Ser Thr Ser Lys Ser Phe Gln Ser Thr Val Thr Gly Glu Leu Asn				
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Ala Pro Tyr Ser Lys Gln Phe Val His Ser Lys Ser Ser Gln Tyr Arg				
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Lys Met Lys Thr Glu Trp Lys Ser Asn Val Tyr Leu Ala Arg Ser Arg				
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Ile Gln Gly Leu Gly Leu Tyr Ala Ala Arg Asp Ile Glu Lys His Thr				
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Met Val Ile Glu Tyr Ile Gly Thr Ile Ile Arg Asn Glu Val Ala Asn				
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Arg Lys Glu Lys Leu Tyr Glu Ser Gln Asn Arg Gly Val Tyr Met Phe				
	355		360	365
Arg Met Asp Asn Asp His Val Ile Asp Ala Thr Leu Thr Gly Gly Pro				
	370		375	380
Ala Arg Tyr Ile Asn His Ser Cys Ala Pro Asn Cys Val Ala Glu Val				
385		390		395
Val Thr Phe Glu Arg Gly Pro Lys Ile Ile Ile Ser Ser Ser Arg Arg				
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Ile Gln Lys Gly Glu Glu Leu Cys Tyr Asp Tyr Lys Phe Asp Phe Glu				
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 <212> DNA
 <213> Homo sapiens

<220>
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<210> 14518
 <211> 651
 <212> PRT
 <213> Homo sapiens

<400> 14518
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 20 25 30
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Pro Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg
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65 70 75 80
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85 90 95
Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln Pro Thr Ala
100 105 110
Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp Asn Asp Asp Arg
115 120 125
Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr Glu Pro Glu Ile Asn
130 135 140
Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu Thr Asn Gln Pro Gly Asp
145 150 155 160
Thr His Gln Asn Val Val Thr Glu Ala Gly Ile Ile Pro Asn Leu
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180 185 190
Ala Phe Gly Thr Cys Cys Phe Gln Met Leu His Lys Ser Lys Gly Arg
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<210> 14521
<211> 1891
<212> DNA
<213> Homo sapiens

<220>
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<222> (248).. (1525)

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<210> 14522
 <211> 426
 <212> PRT
 <213> Homo sapiens

<400> 14522

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			20					25					30		
Gly	Glu	Pro	Ala	Ser	Glu	Leu	Asp	Asp	Asp	Val	Pro	Lys	Ala	Asn	Cys
			35				40					45			
Leu	Ser	Thr	Glu	Ser	Thr	Asp	Thr	Pro	Lys	Ala	Pro	Val	Ile	Thr	Leu
		50			55						60				
Pro	Ser	Glu	Ala	Arg	Glu	Gln	Met	Ala	Thr	Leu	Gly	Glu	Arg	Thr	Phe
		65			70				75					80	
Asn	Cys	Cys	Tyr	Pro	Gly	Cys	His	Phe	Lys	Thr	Val	His	Gly	Met	Lys
			85					90					95		
Asp	Leu	Asp	Arg	His	Leu	Arg	Ile	His	Thr	Gly	Asp	Lys	Pro	His	Lys
			100					105					110		
Cys	Glu	Phe	Cys	Asp	Lys	Cys	Phe	Ser	Arg	Lys	Asp	Asn	Leu	Thr	Met
		115					120					125			
His	Met	Arg	Cys	His	Thr	Ser	Val	Lys	Pro	His	Lys	Cys	His	Leu	Cys
		130				135					140				
Asp	Tyr	Ala	Ala	Val	Asp	Ser	Ser	Ser	Leu	Lys	Lys	His	Leu	Arg	Ile
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			180					185					190			
Thr	Pro	Phe	Gln	Cys	Trp	Leu	Cys	Ser	Ala	Lys	Phe	Lys	Ile	Ser	Ser	
		195					200					205				
Asp	Leu	Lys	Arg	His	Met	Ile	Val	His	Ser	Gly	Glu	Lys	Pro	Phe	Lys	
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Cys	Glu	Phe	Cys	Asp	Val	Arg	Cys	Thr	Met	Lys	Ala	Asn	Leu	Lys	Ser	
225					230					235					240	
His	Ile	Arg	Ile	Lys	His	Thr	Phe	Lys	Cys	Leu	His	Cys	Ala	Phe	Gln	
			245						250					255		
Gly	Arg	Asp	Arg	Ala	Asp	Leu	Leu	Glu	His	Ser	Arg	Leu	His	Gln	Ala	
			260					265					270			
Asp	His	Pro	Glu	Lys	Cys	Pro	Glu	Cys	Ser	Tyr	Ser	Cys	Ser	Ser	Ala	
		275					280					285				
Ala	Ala	Leu	Arg	Val	His	Ser	Arg	Val	His	Cys	Lys	Asp	Arg	Pro	Phe	
	290					295					300					
Lys	Cys	Asp	Phe	Cys	Ser	Phe	Asp	Thr	Lys	Arg	Pro	Ser	Ser	Leu	Ala	
305					310					315					320	
Lys	His	Val	Asp	Lys	Val	His	Arg	Asp	Glu	Ala	Lys	Thr	Glu	Asn	Arg	
			325						330					335		
Ala	Pro	Leu	Gly	Lys	Glu	Gly	Leu	Arg	Glu	Gly	Ser	Ser	Gln	His	Val	
			340					345					350			
Ala	Lys	Ile	Val	Thr	Gln	Arg	Ala	Phe	Arg	Cys	Glu	Thr	Cys	Gly	Ala	
		355					360					365				
Ser	Phe	Val	Arg	Asp	Asp	Ser	Leu	Arg	Cys	His	Lys	Lys	Gln	His	Ser	
		370				375					380					
Asp	Gln	Ser	Glu	Asn	Lys	Asn	Ser	Asp	Leu	Val	Thr	Phe	Pro	Pro	Glu	
385					390					395					400	
Ser	Gly	Ala	Ser	Gly	Gln	Leu	Ser	Thr	Leu	Val	Ser	Val	Gly	Gln	Leu	
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Glu	Ala	Pro	Leu	Glu	Pro	Ser	Gln	Asp	Leu							
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<210> 14523

<211> 1882

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (110).. (1495)

<400> 14523

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<210> 14524
 <211> 462
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Phe Ile Ile His Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Glu Cys
 50 55 60
 Asn Gln Cys Gly Lys Ser Phe Cys Gln Lys Gly Thr Leu Thr Val His
 65 70 75 80

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<211> 2094
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (305).. (1384)

<400> 14525

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<212> PRT

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<400> 14532

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835 840 845
Pro Pro Cys Asn Asn Asp Phe Cys Arg Leu Gly Cys Val Cys Ser Ser
850 855 860
Leu Ala Leu Glu Lys Arg Gln Pro Ala His Cys Arg Arg Pro Asp Cys
865 870 875 880
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Gly Ser Lys Thr Lys His Phe Gln Arg Lys Ala Ala His Arg Asp Pro
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100 105 110
Lys Leu Thr Ala Met Gln Arg Gln Leu Lys Lys His Phe Lys Glu Gly
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<222> (199).. (1620)

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<212> PRT

<213> Homo sapiens

<400> 14538

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 <212> PRT
 <213> Homo sapiens

<400> 14543

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 Glu Ser Cys Ser Thr His Arg Leu Glu His Ser Leu Tyr Lys Pro Gln
 35 40 45
 Lys Gly Leu Phe His Arg Val Pro Leu Val Val Ala Asn Leu Gly Met

-8321/13211-

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Gly Phe Ser Arg Ala Val Gln Thr His Ser Ser Lys Phe Phe Glu Glu		80
	85	90
Asp Gly Ser Leu Lys Glu Val His Lys Ile Asn Glu Met Tyr Ala Ser		95
	100	105
Leu Gln Glu Glu Leu Lys Ser Ile Cys Lys Lys Val Glu Asp Ser Glu		110
	115	120
Gln Ala Val Asp Lys Leu Val Lys Asp Val Asn Arg Leu Lys Arg Glu		125
	130	135
Ile Glu Lys Arg Arg Gly Ala Gln Ile Gln Ala Ala Arg Glu Lys Asn		140
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Ile Gln Lys Asp Pro Gln Glu Asn Ile Phe Leu Cys Gln Ala Leu Arg		160
	165	170
Thr Phe Phe Pro Asn Ser Glu Phe Leu His Ser Cys Val Met Ser Leu		175
	180	185
Lys Asn Arg His Val Ser Lys Ser Ser Cys Asn Tyr Asn His His Leu		190
	195	200
Asp Val Val Asp Asn Leu Thr Leu Met Val Glu His Thr Asp Ile Pro		205
	210	215
Glu Ala Ser Pro Ala Ser Thr Pro Gln Ile Ile Lys His Lys Thr Leu		220
225	230	235
Asp Leu Asp Asp Arg Trp Gln Phe Lys Arg Ser Arg Leu Leu Asp Thr		240
	245	250
Gln Asp Lys Arg Ser Lys Ala Asp Thr Gly Ser Ser Asn Gln Asp Lys		255
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Pro Ala Ile Arg Tyr Lys Asp Val Thr Phe Gln Leu Cys Lys Ala Leu				
	100		105	110
Lys Gly Cys Leu Ser Ile Ser Ser Val Leu Lys Asn Leu Glu Leu Asn				
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Gly Leu Ile Leu Arg Glu Arg Asp Leu Thr Ile Leu Ala Lys Gly Leu				
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Asn Lys Ser Ala Ser Leu Val His Leu Ser Leu Ala Asn Cys Pro Ile				
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Gly Asp Gly Gly Leu Glu Ile Ile Cys Gln Gly Ile Lys Ser Ser Ile				
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Thr Leu Lys Thr Val Asn Phe Thr Gly Cys Asn Leu Thr Trp Gln Gly				
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Ala Asp His Met Ala Lys Ile Leu Lys Tyr Gln Thr Met Arg Arg His				
	195		200	205
Glu Glu Thr Trp Ala Glu Ser Leu Arg Tyr Arg Arg Pro Asp Leu Asp				
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Cys Met Ala Gly Leu Arg Arg Ile Thr Leu Asn Gly Tyr Thr Leu Ile				
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Gly Asp Leu Gly Ala Cys Ala Phe Ala Asp Ser Leu Ser Glu Asp Leu				
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Trp Leu Arg Ala Leu Asp Leu Gln Gln Cys Gly Leu Thr Asn Glu Gly				
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Leu Asp Ile Arg Lys Asn Pro Leu Ile Asp His Ser Met Met Lys Ala				
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Gln Lys Arg Arg Thr Ile Ile Leu Gly Ser Gly His Lys Gly Lys Ala				
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Lys His Ser Leu Gly Lys Glu Tyr Tyr Ala Pro Ala Pro Leu Pro Pro				
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<211> 800

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<213> Homo sapiens

<400> 14555

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Ile Asn Asp Trp Thr His Cys Val Glu Thr Ser Gln Ser Gln Ser His		
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Thr Leu Ala Ile Arg Lys Leu Cys Trp Lys Asn Cys Ser Gly Lys Thr		
	755	760
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<400> 14559

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Lys	Lys	Asp	Phe	Arg	Ala	Met	Lys	Asp	Leu	Ala	Gln	Gln	Ile	Asn	Leu	65	70	75	80
Ser	Pro	Lys	Gln	His	His	Ser	Ala	Leu	Glu	Cys	Leu	Leu	Gln	Arg	Ile	85	90	95	
Ala	Lys	Asn	Glu	Ala	Ala	Thr	Asn	Glu	Leu	Met	Arg	Trp	Gly	Leu	Arg	100	105	110	
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Gln	Pro	Lys	Met	Val	Val	Phe	Val	Val	Gln	Lys	Lys	Ile	Ser	Thr	Asn
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Val	Val	Asp	His	Thr	Ile	Thr	Ser	Cys	Glu	Trp	Val	Asp	Phe	Tyr	Leu
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Leu	Ala	His	His	Val	Arg	Gln	Gly	Cys	Gly	Ile	Pro	Thr	His	Tyr	Val
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Cys	Val	Leu	Asn	Thr	Ala	Asn	Leu	Ser	Pro	Asp	His	Met	Gln	Arg	Leu
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Thr	Phe	Lys	Leu	Cys	His	Met	Tyr	Trp	Asn	Trp	Pro	Gly	Thr	Ile	Arg
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His	Ile	Leu	His	His	Gly	Pro	Ala	Ile	Gln	Leu	Cys	Glu	Asn	Leu	Phe
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Phe	Leu														
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<220>
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0002270" 59462960

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<211> 176

<212> PRT

<213> Homo sapiens

000270" 69462960

<400> 14561

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	50					55					60				
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	130					135					140				
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<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (45).. (533)

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008220" 69462960

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 <212> PRT
 <213> Homo sapiens

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          20             25             30
Ala Phe Ile Ile Cys Phe Tyr Leu Glu Val Gly Gln Leu Ser Gln Asp
          35             40             45
Arg Asp Phe Ile Met Thr Phe Asn Thr Ser Leu His Arg Ser Trp Trp
          50             55             60
Met Glu Asn Gly Pro Gly Cys Leu Val Thr Pro Val Leu Asn Ser Arg
          65             70             75             80
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000220" 6962960

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Ala	Leu	Phe	Gly	Phe	Val	Phe	Ala	Cys	Tyr	Val	Ser	Lys	Val	Phe	Leu				
		115					120					125							
Glu	Glu	Glu	Asp	Ser	Phe	Asp	Phe	Ile	Gly	Gly	Phe	Asp	Ser	Tyr	Gly				
	130					135					140								
Tyr	Gln	Ala	Pro	Gln	Lys	Thr	Ser	His	Leu	Gln	Leu	Gln	Pro	Leu	Tyr				
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<400> 14565

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Ile	Leu	Leu	Leu	Glu	Gln	Phe	Phe	Leu	Pro	His	Ser	Arg	Gly	Ser	Ser	35	40	45	
His	Gly	Gln	Ser	Arg	Ile	Ile	Arg	Lys	Ala	Tyr	Leu	Glu	Asp	Phe	Tyr	50	55	60	
Thr	Arg	Met	Met	His	Glu	Cys	Tyr	Gln	Ile	Trp	Ala	Gln	Leu	Glu	His	65	70	75	80
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Gln	Arg	Val	Glu	His	Gln	Cys	Leu	Ser	Ser	Glu	Glu	Leu	Lys	Gln	Arg	115	120	125	
Phe	Pro	Asn	Ile	Arg	Leu	Pro	Arg	Gly	Glu	Val	Gly	Leu	Leu	Asp	Asn	130	135	140	
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Asn	Val	Cys	Tyr	Trp	Arg	Glu	Met	Val	Pro	Gly	Ser	Tyr	Gly	Val	Ser	225	230	235	240
Gln	Ala	Phe	Pro	Cys	Phe	Leu	Trp	Leu	Gly	Leu	Cys	Pro	His	His	Ile	245	250	255	
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000220"69462960

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290 295 300
His Leu Pro Asp Leu Lys Pro Glu Pro Ala Val Ile Glu Ser Cys Met
305 310 315 320
Tyr Thr Asn Thr Pro Asp Glu Gln Phe Ile Leu Asp Arg His Pro Lys
325 330 335
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 <212> PRT
 <213> Homo sapiens

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Ile Glu Gly Val Lys Gln Val Ile Val Val Ala Ser Gly Lys Gly Gly
          35             40             45
Val Gly Lys Ser Thr Thr Ala Val Asn Leu Ala Leu Ala Leu Ala Ala
          50             55             60
Asn Asp Ser Ser Lys Ala Ile Gly Leu Leu Asp Val Asp Val Tyr Gly
          65             70             75             80
Pro Ser Val Pro Lys Met Met Asn Leu Lys Gly Asn Pro Glu Leu Ser
          85             90             95
Gln Ser Asn Leu Met Arg Pro Leu Leu Asn Tyr Gly Ile Ala Cys Met
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Ser Met Gly Phe Leu Val Glu Glu Ser Glu Pro Val Val Trp Arg Gly
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Val Ser Thr Pro Gln Asp Ile Ala Leu Met Asp Ala His Lys Gly Ala				
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Glu Met Phe Arg Arg Val His Val Pro Val Leu Gly Leu Val Gln Asn				
	195		200	205
Met Ser Val Phe Gln Cys Pro Lys Cys Lys His Lys Thr His Ile Phe				
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Gly Gln Pro Ile Val Phe Ser Gln Pro Glu Ser Asp Glu Ala Lys Ala				
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<213> Homo sapiens

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Thr Thr Thr Pro Val Pro Ser Ile Phe Ser Gly Leu Val Ser Leu Pro
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Pro Arg Ser Thr Leu Gly Ser Ser Glu Ala Phe Ala Ser Thr Ser Ala
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Leu Pro Gly Phe Ala Ser Ala Phe Ser Ser Asn Phe Asn Ser Ala Leu
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Val Ala Gln Ala Gly Leu Ser Ser Gly Leu Gln Ala Ala Gly Ser Ser
545 550 555 560
Val Phe Pro Gly Leu Ser Leu Pro Gly Ile Pro Gly Phe Pro Gln
565 570 575
Asn Pro Ser Gln Ser Ser Leu Gln Glu Leu Gln His Asn Ala Ala Ala
580 585 590
Gln Ser Ala Leu Leu Gln Gln Val His Ser Ala Ser Ala Leu Glu Ser
595 600 605
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 35 40 45
 Glu Tyr Leu Pro Asn Pro Ser Glu Val Gln Asn Tyr Ala Ile Leu Asn
 50 55 60
 Lys Glu Asp Asp Ser Lys Glu Lys Thr Lys Ile Leu Met Asn Ser Ser
 65 70 75 80
 Arg Asp Asn Ser His Pro Phe Val Gly Leu Ala Phe Lys Leu Glu Phe
 85 90 95
 Leu Ser Arg Ser Phe Phe Arg Leu Thr Arg Gln Lys Asp His Arg Arg
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<212> DNA

<213> Homo sapiens

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<400> 14584

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<211> 386

<212> PRT

<213> Homo sapiens

<400> 14585

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Ile	Ala	Val	His	Thr	Ala	Ser	Ser	Asn	Leu	Val	Pro	Ser	Leu	Leu	Gly
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Lys	Glu	Asp	Met	Glu	Thr	Lys	Lys	Asp	His	Pro	Tyr	Thr	Trp	Arg	
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<400> 14586

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (6).. (1490)

<400> 14588

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<400> 14589

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Ser	Gln	Ala	Gly	Pro	Ala	Leu	Gly	Trp	Arg	Asp	Thr	Trp	Ala	Phe	Val	35	40	45	
Gly	Arg	Lys	Gly	Gly	Pro	Val	Phe	Gly	Glu	Lys	His	Ser	Lys	Ser	Pro	50	55	60	
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<400> 14591

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<400> 14592

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          50             55             60
His Pro Met Phe Phe Thr His Asp Arg Ala Phe Glu Glu Leu Phe Gly
          65             70             75             80
Ile Cys Ile Gln Leu Leu Asn Lys Thr Trp Lys Glu Met Arg Ala Thr
          85             90             95
Ala Glu Asp Phe Asn Lys Val Met Gln Val Val Arg Glu Gln Ile Thr
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Arg Ala Leu Pro Ser Lys Pro Asn Ser Leu Asp Gln Phe Lys Ser Lys
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Glu Ser Leu Gln Glu Lys Ile Pro Val Ala Asp Ile Lys Ala Ile Val
225 230 235 240
Thr Gly Lys Asp Cys Pro His Met Lys Glu Lys Ser Ala Leu Lys Gln
245 250 255
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260 265 270
Glu Thr Leu Asn Phe Ile Ala Pro Asn Lys Tyr Glu Tyr Cys Ile Trp
275 280 285
Ile Asp Gly Leu Ser Ala Leu Leu Gly Lys Asp Met Ser Ser Glu Leu
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Thr Lys Ser Asp Leu Asp Thr Leu Leu Ser Met Glu Met Lys Leu Arg
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 <212> PRT
 <213> Homo sapiens

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Gly Glu Gln Glu Pro Ile Thr Val Asp Gln Thr Trp Arg Gly Asp Pro
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Asp Ser Glu Ala Asp Ser Ile Asp Ser Asp Gln Glu Asp Pro Leu Lys
             65             70             75             80
His Ala Gly Val Tyr Thr Ala Glu Glu Val Ala Leu Ile Met Arg Glu
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Lys Leu Ile Arg Leu Gln Ser Leu Tyr Ile Asp Gln Phe Lys Arg Leu
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Gln His Leu Leu Lys Glu Lys Lys Arg Arg Tyr Leu His Asn Arg Lys
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Val Glu His Glu Ala Leu Gly Ser Ser Leu Leu Thr Gly Pro Glu Gly
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Leu Leu Ala Lys Glu Arg Glu Asn Leu Lys Arg Leu Lys Cys Leu Arg
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Thr Thr Arg Ser Ser Gln Arg Cys Leu Ala Phe Val Asp Asp Val Arg
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Cys Ser Asn Gln Ser Leu Pro Met Thr Arg His Cys Leu Thr His Ile
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Cys Gln Asp Thr Asn Gln Val Leu Phe Lys Cys Cys Gln Gly Ser Glu
225 230 235 240
Glu Val Pro Cys Asn Lys Pro Val Pro Val Ser Leu Ser Glu Asp Pro
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Cys Cys Pro Leu His Phe Gln Leu Pro Pro Gln Met Tyr Lys Pro Glu
260 265 270
Gln Val Leu Ser Val Pro Asp Asp Leu Glu Ala Gly Pro Met Asp Leu
275 280 285
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290 295 300
Phe Ser Asp Asp Leu Asp Val Val Gly Asp Gly Met Gln Cys Pro Pro
305 310 315 320
Ser Pro Leu Leu Phe Asp Pro Ser Leu Thr Leu Glu Asp His Leu Val
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Lys Glu Ile Ala Glu Asp Thr Val Asp Ile Leu Gly Gln Met Gln Met
340 345 350
Ala Gly Asp Gly Cys Arg Ser Gln Gly Ser Arg Asn Ser Glu Lys Ala
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 <211> 353
 <212> PRT
 <213> Homo sapiens

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 50 55 60
 Pro Thr Val Asp Gly Thr Trp Lys Thr Pro Ser Phe Pro Lys Lys Lys
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His	Leu	Thr	Lys	Lys	Leu	Leu	Asn	Arg	Asp	Ile	Gln	Val	Gly	Lys	Ser				
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<210> 14603

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<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (169).. (2223)

<400> 14603

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 <212> PRT
 <213> Homo sapiens

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65 70 75 80
Ser Leu Gln Ser Cys Trp Ala Ala Cys Cys Gln Asp Ser Ala Cys His
85 90 95
Val Phe Trp Trp Leu Glu Gly Met Cys Ile Gln Ala Asp Cys Ser Arg
100 105 110
Pro Gln Ser Cys Arg Ala Phe Arg Thr His Ser Ser Asn Ser Met Leu
115 120 125
Val Phe Leu Lys Lys Phe Gln Thr Ala Asp Asp Leu Gly Phe Leu Pro
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Glu Asp Asp Val Pro His Leu Leu Gly Leu Gly Trp Asn Trp Ala Ser
145 150 155 160
Trp Arg Gln Ser Pro Pro Arg Ala Ala Leu Arg Pro Ala Val Ser Ser
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Ser Asp Gln Gln Ser Leu Ile Arg Lys Leu Gln Lys Arg Gly Ser Pro
180 185 190
Ser Asp Val Val Thr Pro Ile Val Thr Gln His Ser Lys Val Asn Asp
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Ser Asn Glu Leu Gly Gly Leu Thr Thr Ser Gly Ser Ala Glu Val His
210 215 220
Lys Ala Ile Thr Ile Ser Ser Pro Leu Thr Thr Asp Leu Thr Ala Glu
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<211> 1985

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (3).. (1685)

<400> 14605

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<212> PRT

<213> Homo sapiens

<400> 14606

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Leu	Val	Tyr	Asn	Ser	Gly
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Ala Ser Gln Asp Ala Ala Leu Ala Phe Arg Val Arg Arg Pro Ala Ser
180 185 190
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Gly Lys Gly Val Ser Trp Gly Gly Arg Gln Ala Gly Leu Phe Ser Pro
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260 265 270
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Ile Phe Glu Glu Leu Leu Ser Leu Lys Ile Arg Ile Ser Pro Asp Ala
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340 345 350
Cys Gly Thr Gly Val Ile Gly Leu Ser Leu Ala Gln His Thr Ser Arg
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Val Leu Gly Ile Glu Leu Leu Glu Gln Ala Val Glu Asp Ala Arg Trp
370 375 380
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385 390 395 400
Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser Lys Glu Asp Gly Gln
405 410 415
Ser Ile Val Ala Val Val Asn Pro Ala Arg Ala Gly Leu His Tyr Lys
420 425 430
Val Ile Gln Ala Ile Arg Asn Phe Arg Ala Ile His Thr Leu Val Phe
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<222> (262).. (1794)

<400> 14628

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Gln Lys Thr Glu Leu Arg Lys Glu Gly Phe Asp Pro Ala Ile Val Lys
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 Phe Ser His Glu Val Ile Val Met Asp Met Asp Pro Phe Leu His Cys
 50 55 60
 Val Ile Pro Asn Phe Ile Gln Ser Gln Asp Phe Leu Glu Gly Leu Gln
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1998

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<213> Homo sapiens

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<222> (309).. (761)

<400> 14633

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Gln Pro Ala Leu Lys Gln Arg Glu Ala Ile Leu Lys Leu Ile Leu Lys
50 55 60
Asn Glu Asn Val Asp Arg His Val Asp Leu Leu Glu Val Ala Gln Glu
65 70 75 80
Thr Asp Gly Phe Ser Gly Ser Asp Leu Lys Glu Met Cys Arg Asp Ala
85 90 95
Ala Leu Leu Cys Val Arg Glu Tyr Val Asn Ser Thr Ser Glu Glu Ser
100 105 110
His Asp Glu Asp Glu Ile Arg Pro Val Gln Gln Gln Asp Leu His Arg
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Leu Thr His Val Cys Leu Asp
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Cys Glu Lys Thr Ala Val Glu Phe Gly Asn Gln Leu Glu Gly Lys Trp
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Ala Val Leu Gly Thr Leu Leu Gln Glu Tyr Gly Leu Leu Gln Arg Arg
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Leu Glu Asn Val Glu Asn Leu Leu His Asn Arg Asn Leu Trp Ile Leu
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Arg Leu Pro Pro Gly Ser Lys Gly Glu Ser Pro Lys Thr Thr Pro Ser
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Pro Ser Pro Arg Ser Ser Pro Arg Leu Asn Lys Gly Arg Ser Pro Ala
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<400> 14647

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	115					120					125				
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	130				135					140					
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-8442/13211-

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Gln Thr Phe Phe Ala Val Ile Gly Ala Leu Leu Gln Ser Ser Gly Pro
195 200 205
Glu Arg Thr Ala Leu Phe Ile Arg Asp Phe Leu Ile Thr Gln Met Thr
210 215 220
Gly Lys Glu Leu Phe Glu Met Trp Lys Ile Ile Asn Pro Met Gly Leu
225 230 235 240
Leu Val Glu Glu Leu Lys Lys Arg Asn Val Ser Ala Pro Glu Ser Arg
245 250 255
Leu Thr Arg Gln Ser Gly Gly Thr Thr Ala Leu Pro Leu Tyr Phe Val
260 265 270
Gly Leu Tyr Cys Asp Lys Lys Leu Ile Ala Glu Gly Pro Gly Glu Thr
275 280 285
Val Leu Val Ala Glu Glu Glu Ala Ala Arg Val Ala Leu Arg Lys Leu
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<212> DNA
<213> Homo sapiens

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<222> (1668).. (2018)

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<212> PRT
<213> Homo sapiens

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35 40 45
Glu Asn Glu Lys Val Leu Pro Ala Pro Gly Ala Ser Ser Leu Ala Leu
50 55 60
Ile Leu Gly Arg Pro Arg Gly Asn Leu His Thr Arg Pro Phe Cys Ala

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<213> Homo sapiens

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<222> (377).. (748)

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 <212> PRT
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 35 40 45
 Gly Gln Leu Ser Thr Asp Val Pro Ser Leu Leu Glu Glu Thr Pro Ala
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 Leu Ala Cys Ser Pro Asp Gly Pro Ser Gln Ser Gly Val Gly Trp His
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 Ile Ser Arg Cys Ser Ser Pro Ser Cys His Gly Leu Gln Ser Trp Ala
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<210> 14652
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<220>
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 <222> (248).. (1033)

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<400> 14652

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<211> 262

<212> PRT

<213> Homo sapiens

<400> 14653

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 Thr Ser Ser Ser Arg Tyr Phe Asp Glu Pro Val Glu Leu Arg Ser Ser
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 Ser Phe Ser Ser Trp Asp Asp Ser Ser Asp Ser Tyr Trp Lys Lys Glu
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 Arg Pro Thr Ala Arg Arg Lys Pro Asp Tyr Glu Pro Val Glu Asn Thr
 145 150 155 160
 Asp Glu Ala Gln Lys Lys Phe Gly Asn Val Lys Ala Ile Ser Ser Asp
 165 170 175
 Met Tyr Phe Gly Arg Gln Ser Gln Ala Asp Tyr Glu Thr Arg Ala Arg
 180 185 190
 Leu Glu Arg Leu Ser Ala Ser Ser Ser Ile Ser Pro Ala Asp Leu Phe
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 Glu Glu Pro Arg Lys Gln Pro Ala Gly Asn Tyr Ser Leu Ser Ser Val
 210 215 220
 Leu Pro Asn Ala Pro Asp Met Ala Gln Phe Lys Gln Gly Val Arg Ser
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 <212> DNA
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<220>
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 <222> (133).. (480)

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<210> 14655
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 14655
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 35 40 45
 Ala Val Gly Ala Thr Ile Gly Gly Val Ala Trp Ile Gly Gly Lys Ser
 50 55 60
 Leu Glu Val Thr Lys Thr Ala Val Thr Thr Val Pro Ser Met Gly Ile
 65 70 75 80
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 Asp Lys Ser Asp
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<210> 14656
 <211> 1828
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (284).. (1537)

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<210> 14657
 <211> 418
 <212> PRT
 <213> Homo sapiens

<400> 14657

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Met	Glu	Pro	Lys	Val	Ile	Asn	Gln	Thr	Leu	Ser	Lys	Ala	Ala	Gln	Ser	35	40	45	
Gly	Gln	Trp	Lys	Tyr	Gly	Gln	His	Ala	Cys	Phe	Cys	Gln	Lys	Gln	Gly	50	55	60	
Ser	Gly	Asn	Asn	Trp	Ala	Tyr	Gly	Tyr	Ser	Val	His	Gly	Pro	Arg	His	65	70	75	80
Glu	Glu	Ser	Ile	Met	Asn	Ile	Ile	Arg	Lys	Glu	Val	Glu	Lys	Cys	Asp	85	90	95	
Ser	Phe	Ser	Gly	Phe	Phe	Ile	Ile	Met	Ser	Met	Ala	Gly	Gly	Thr	Gly	100	105	110	
Ser	Gly	Leu	Gly	Ala	Phe	Val	Thr	Gln	Asn	Leu	Glu	Asp	Gln	Tyr	Ser	115	120	125	
Asn	Ser	Leu	Lys	Met	Asn	Gln	Ile	Ile	Trp	Pro	Tyr	Gly	Thr	Gly	Glu	130	135	140	
Val	Ile	Val	Gln	Asn	Tyr	Asn	Ser	Ile	Leu	Thr	Leu	Ser	His	Leu	Tyr	145	150	155	160
Arg	Ser	Ser	Asp	Ala	Leu	Leu	Leu	His	Glu	Asn	Asp	Ala	Ile	His	Lys	165	170	175	
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		195						200					205						
Ser	Ala	Glu	Ser	Ser	Phe	His	Tyr	Arg	Arg	Asn	Pro	Leu	Gly	Asp	Leu				
	210					215					220								
Met	Glu	His	Leu	Val	Pro	His	Pro	Glu	Phe	Lys	Met	Leu	Ser	Val	Arg				
225					230					235					240				
Asn	Ile	Pro	His	Met	Ser	Glu	Asn	Ser	Leu	Ala	Tyr	Thr	Thr	Phe	Thr				
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		260					265				270								
Lys	Met	Glu	Gly	Ile	Asp	Arg	His	Val	Trp	Pro	Pro	Leu	Ser	Gly					
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Leu	Pro	Pro	Leu	Ser	Lys	Met	Ser	Leu	Asn	Lys	Asp	Leu	His	Phe	Asn				
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Thr	Ser	Ile	Ala	Asn	Leu	Val	Ile	Leu	Arg	Gly	Lys	Asp	Val	Gln	Ser				
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Ala	Asp	Val	Glu	Gly	Phe	Lys	Asp	Pro	Ala	Leu	Tyr	Thr	Ser	Trp	Leu				
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Lys	Pro	Val	Asn	Ala	Phe	Asn	Val	Trp	Lys	Thr	Gln	Arg	Ala	Phe	Ser				
		340					345				350								
Lys	Tyr	Glu	Lys	Ser	Ala	Val	Leu	Val	Ser	Asn	Ser	Gln	Phe	Leu	Val				
	355					360					365								
Lys	Pro	Leu	Asp	Met	Ile	Val	Gly	Lys	Ala	Trp	Asn	Met	Phe	Ala	Ser				
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Lys	Ala	Tyr	Ile	His	Gln	Tyr	Thr	Lys	Phe	Gly	Ile	Glu	Glu	Glu	Asp				
385				390					395					400					
Phe	Leu	Asp	Ser	Phe	Thr	Ser	Leu	Glu	Gln	Val	Val	Ala	Ser	Tyr	Cys				
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<210> 14658
 <211> 520
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (21).. (293)

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 tcaactgagtt tgaaatcaca ccagaaggaa gaaggattac taaattagat cagattttgc 240
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<210> 14659
<211> 91
<212> PRT
<213> Homo sapiens

<400> 14659
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20 25 30
Asp Lys Glu Ile Val Gly Thr Leu Leu Gly Phe Asp Asp Phe Val Asn
35 40 45
Met Val Leu Glu Asp Val Thr Glu Phe Glu Ile Thr Pro Glu Gly Arg
50 55 60
Arg Ile Thr Lys Leu Asp Gln Ile Leu Leu Asn Gly Asn Asn Ile Thr
65 70 75 80
Met Leu Val Pro Gly Gly Glu Gly Pro Glu Val
85 90

<210> 14660
<211> 1951
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (124).. (1005)

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<210> 14661
 <211> 294
 <212> PRT
 <213> Homo sapiens

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Cys Lys Cys His Lys Asp Glu Thr Val Thr Ile Glu Thr Val Phe Pro
             35             40             45
Phe Asp Val Ala Val Lys Phe Val Ser Thr Lys Phe Glu His Leu Glu
             50             55             60
Arg Val Tyr Ala Asp Ile Pro Phe Leu Leu Met Thr Asp Leu Leu Ser
             65             70             75             80
Ala Ser Pro Trp Ala Leu Thr Ile Val Ser Ser Glu Leu Gln Leu Ala
             85             90             95
Pro Ser Met Thr Thr Val Asp Gln Leu Glu Ser Gln Val Asp Asn Val
             100            105            110
Ile Leu Gln Thr Gly Glu Ser Ala Ser Glu Cys Phe Cys Leu Gln Cys
             115            120            125
Pro Ser Leu Gly Asn Ile Glu Gly Gly Val Ala Thr Gly His Tyr Ile
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Val	Asn	Ala	Asp	Leu	Pro	Ser	Phe	Gly	Arg	Val	Arg	Glu	Ser	Leu	Pro
		180		185		190									
Val	Lys	Tyr	His	Leu	Gln	Asn	Lys	Thr	Asp	Leu	Val	Gln	Asp	Val	Glu
		195		200		205									
Ile	Ser	Val	Glu	Pro	Ser	Asp	Ala	Phe	Met	Phe	Ser	Gly	Leu	Lys	Gln
		210		215		220									
Ile	Arg	Leu	Arg	Ile	Leu	Pro	Gly	Thr	Glu	Gln	Glu	Met	Leu	Tyr	Asn
		225		230		235									240
Phe	Tyr	Pro	Leu	Met	Ala	Gly	Tyr	Gln	Gln	Leu	Pro	Ser	Leu	Asn	Ile
		245		250		255									
Asn	Leu	Leu	Arg	Phe	Pro	Asn	Phe	Thr	Asn	Gln	Leu	Leu	Arg	Arg	Phe
		260		265		270									
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<210> 14662
 <211> 1887
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (98).. (736)

<400> 14662

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<210> 14663
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 <212> PRT
 <213> Homo sapiens

<400> 14663

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			20					25					30		
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Cys	Leu	Gly	Glu	Phe	Leu	Pro	Arg	Leu	Leu	Asp	Pro	Ser	Ala	Glu	Ile
				165					170					175	
Ile	Val	Leu	Lys	Glu	Pro	Pro	Thr	Ile	Arg	Pro	Asn	Ser	Pro	Tyr	Asp
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195
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210

200

205

<210> 14664
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<212> DNA
<213> Homo sapiens

<220>
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<211> 255

<212> PRT

<213> Homo sapiens

<400> 14665

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Lys Tyr Phe Thr Leu Gly Leu Pro Thr Gly Leu Pro Arg Asp His Pro
35 40 45
Glu Ser Tyr His Ser Phe Met Trp Asn Asn Phe Phe Lys His Ile Asp
50 55 60
Ile His Pro Glu Asn Ala His Ile Leu Asp Gly Asn Ala Val Asp Leu
65 70 75 80
Gln Ala Glu Cys Asp Ala Phe Glu Glu Lys Ile Lys Ala Ala Gly Gly
85 90 95
Ile Glu Leu Phe Val Gly Gly Ile Gly Pro Asp Gly His Ile Ala Phe
100 105 110
Asn Glu Pro Gly Ser Ser Leu Val Ser Arg Thr Arg Val Lys Thr Leu
115 120 125
Ala Met Asp Thr Ile Leu Ala Asn Ala Arg Phe Phe Asp Gly Glu Leu
130 135 140
Thr Lys Val Pro Thr Met Ala Leu Thr Val Gly Val Gly Thr Val Met
145 150 155 160
Asp Ala Arg Glu Val Met Ile Leu Ile Thr Gly Ala His Lys Ala Phe
165 170 175
Ala Leu Tyr Lys Ala Ile Glu Glu Gly Val Asn His Met Trp Thr Val
180 185 190
Ser Ala Phe Gln Gln His Pro Arg Thr Val Phe Val Cys Asp Glu Asp
195 200 205
Ala Thr Leu Glu Leu Lys Val Lys Thr Val Lys Tyr Phe Lys Gly Leu
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225 230 235 240
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<210> 14666

<211> 1516

<212> DNA

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<213> Homo sapiens

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<222> (56)..(1447)

<400> 14666

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<211> 464

<212> PRT

<213> Homo sapiens

<400> 14667

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Thr Pro Lys Pro Leu Glu Thr Glu Pro Ser Arg Glu Thr Ala Trp Ser

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Ile	Asp	Asp	Pro	Gln	Glu	Gln	His	Arg	Val	Ile	Ser	Ser	Asn	Leu	Ala				
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Leu	Ile	Gln	Val	Gln	Ala	Thr	Val	Val	Gly	Leu	Leu	Ala	Ala	Val	Ala				
		115					120						125						
Ala	Leu	Leu	Leu	Gly	Val	Val	Ser	Arg	Glu	Glu	Val	Asp	Val	Ala	Lys				
	130					135					140								
Val	Glu	Leu	Leu	Cys	Ala	Ser	Ser	Val	Leu	Thr	Ala	Phe	Leu	Ala	Ala				
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Leu	Gly	Val	Asn	Pro	Asp	Asn	Ile	Ala	Thr	Pro	Ile	Ala	Ala	Ser	Leu				
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Met	Val	Ile	Ser	Ser	Phe	Gly	Gly	Leu	Ile	Leu	Ser	Lys	Thr	Val	Ser				
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			325						330					335					
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			340					345					350						
Phe	Phe	Tyr	Ile	Ile	Tyr	Leu	Val	Glu	Gly	Gln	Ser	Val	Ile	Asn	Ser				
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Gln	Thr	Phe	Val	Val	Leu	Tyr	Leu	Leu	Ala	Gly	Leu	Ile	Gln	Val	Thr				
	370					375					380								
Ile	Leu	Leu	Tyr	Leu	Ala	Glu	Val	Met	Val	Arg	Leu	Thr	Trp	His	Gln				
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Asp	Leu	Leu	Gly	Ser	Ser	Ser	Val	Gly	His	Thr	Ala	Ala	Val	Pro	Arg				
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Arg	Cys	Thr	Ala	Ser	Pro	Gly	Trp	Gly	Leu	Ile	Gln	Pro	Phe	Ile	Cys				

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 <212> DNA
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<220>
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 <222> (196).. (1464)

<400> 14668

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<212> PRT

<213> Homo sapiens

<400> 14669

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			20					25					30		
Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Leu	Lys	Asp	Lys	Asn	Glu	Phe	His
		35					40					45			
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met
	50					55					60				
Pro	Leu	Asp	Lys	His	Met	Glu	Val	Glu	Asn	Ile	Ser	Ser	Glu	Glu	Val
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Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Cys	Thr	Ala	Pro	Gln	Pro	Glu	Gln
				85					90					95	
Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
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Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Asp	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
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Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys
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Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Leu	Ser
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Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Gly	Ser	Gly
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Ser	Leu	Lys	Ser	Thr	Leu	Thr	Gly	Asn	Lys	Val	Phe	Asn	Cys	Ile	Ser
	290					295					300				
Tyr	Ser	Pro	Leu	Cys	Lys	Arg	Leu	Ala	Ser	Gly	Ser	Thr	Asp	Arg	His
305					310					315					320
Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser	Leu
				325					330					335	
Ser	Leu	Thr	Ser	His	Thr	Gly	Trp	Val	Thr	Ser	Val	Lys	Trp	Ser	Pro
			340					345					350		

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Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val Lys
355 360 365
Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala Ala
370 375 380
His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu Leu
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Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser Pro
405 410 415
Thr Thr Ser His Val Gly Ala
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<213> Homo sapiens

<220>
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gccgtagatg atgttccctt ctcaatccct gctgcctctg aaattgccga ccttagtaac 300
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<211> 423

<212> PRT

<213> Homo sapiens

<400> 14671

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			20					25					30		
Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Leu	Lys	Asp	Lys	Asn	Glu	Phe	His
		35					40					45			
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met
	50					55					60				
Pro	Leu	Asp	Lys	His	Met	Glu	Val	Glu	Asn	Ile	Ser	Ser	Glu	Glu	Val
65					70					75					80
Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Cys	Thr	Ala	Pro	Gln	Pro	Glu	Gln
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Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
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Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Asp	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
		115					120					125			
Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys
	130					135					140				
Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Leu	Ser
145					150					155					160
Ala	Ser	Met	Asp	Gln	Thr	Ile	Leu	Leu	Trp	Glu	Trp	Asn	Val	Glu	Arg
				165					170					175	
Asn	Lys	Val	Lys	Ala	Leu	His	Cys	Cys	Arg	Gly	His	Ala	Gly	Ser	Val
		180					185						190		
Asp	Ser	Ile	Ala	Val	Asp	Gly	Ser	Gly	Thr	Lys	Phe	Cys	Ser	Gly	Ser
	195					200						205			
Trp	Asp	Lys	Met	Leu	Lys	Ile	Trp	Ser	Thr	Val	Pro	Thr	Asp	Glu	Glu
	210				215						220				
Asp	Glu	Met	Glu	Glu	Ser	Thr	Asn	Arg	Pro	Arg	Lys	Lys	Gln	Lys	Thr
225					230					235					240
Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly	His
				245					250					255	
Met	Glu	Ala	Val	Ser	Ser	Val	Leu	Trp	Ser	Asp	Ala	Glu	Glu	Ile	Cys
			260					265					270		
Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Gly	Ser	Gly
	275					280						285			
Ser	Leu	Lys	Ser	Thr	Leu	Thr	Gly	Asn	Lys	Val	Phe	Asn	Cys	Ile	Ser

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Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg His
305 310 315 320
Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser Leu
325 330 335
Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser Pro
340 345 350
Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val Lys
355 360 365
Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala Ala
370 375 380
His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu Leu
385 390 395 400
Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser Pro
405 410 415
Thr Thr Ser His Val Gly Ala
420

<210> 14672
<211> 1878
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (53).. (1114)

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cgatccaccg cccgcgcacc gcgcacatcc tcgccaccct cggcctgcgg ctgcagccctc 180
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cgtgaagctg ctcatccagg tgggtcatga gccgatgcc cccacccttg ggaccaatgt 360
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<211> 354
<212> PRT
<213> Homo sapiens

<400> 14673
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35 40 45
Gly Gly Ser Gly Gly Leu Gly Ser Gly Asp Asn Ala Pro Thr Thr Glu
50 55 60
Ala Leu Phe Val Ala Leu Gly Ala Gly Val Thr Ala Leu Ser His Pro
65 70 75 80
Leu Leu Tyr Val Lys Leu Leu Ile Gln Val Gly His Glu Pro Met Pro
85 90 95
Pro Thr Leu Gly Thr Asn Val Leu Gly Arg Lys Val Leu Tyr Leu Pro
100 105 110
Ser Phe Phe Thr Tyr Ala Lys Tyr Ile Val Gln Val Asp Gly Lys Ile
115 120 125
Gly Leu Phe Arg Gly Leu Ser Pro Arg Leu Met Ser Asn Ala Leu Ser
130 135 140
Thr Val Thr Arg Gly Ser Met Lys Lys Val Phe Pro Pro Asp Glu Ile
145 150 155 160
Glu Gln Val Ser Asn Lys Asp Asp Met Lys Thr Ser Leu Lys Lys Val
165 170 175
Val Lys Glu Thr Ser Tyr Glu Met Met Met Gln Cys Val Ser Arg Met
180 185 190
Leu Ala His Pro Leu His Val Ile Ser Met Arg Cys Met Val Gln Phe
195 200 205
Val Gly Arg Glu Ala Lys Tyr Ser Gly Val Leu Ser Ser Ile Gly Lys

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210		215		220
Ile Phe Lys Glu Glu Gly Leu Leu Gly Phe Phe Val Gly Leu Ile Pro				
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His Leu Leu Gly Asp Val Val Phe Leu Trp Gly Cys Asn Leu Leu Ala				
	245		250	255
His Phe Ile Asn Ala Tyr Leu Val Asp Asp Ser Phe Ser Gln Ala Leu				
	260		265	270
Ala Ile Arg Ser Tyr Thr Lys Phe Val Met Gly Ile Ala Val Ser Met				
	275		280	285
Leu Thr Tyr Pro Phe Leu Leu Val Gly Asp Leu Met Ala Val Asn Asn				
	290		295	300
Cys Gly Leu Gln Ala Gly Leu Pro Pro Tyr Ser Pro Val Phe Lys Ser				
305		310		315
Trp Ile His Cys Trp Lys Tyr Leu Ser Val Gln Gly Gln Leu Phe Arg				
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Gly Ser Ser Leu Leu Phe Arg Arg Val Ser Ser Gly Ser Cys Phe Ala				
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 <211> 541
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (51).. (407)

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<210> 14675
 <211> 119
 <212> PRT
 <213> Homo sapiens

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<400> 14675

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Ile Gly Phe Leu Gly Tyr Cys Ser Gly Leu Ile Asp Asn Val Ile Arg
      35           40           45
Arg Arg Pro Ile Ala Thr Ala Gly Leu His Arg Gln Leu Leu Tyr Ile
      50           55           60
Thr Ala Phe Phe Phe Ala Gly Tyr Tyr Leu Val Lys Arg Glu Asp Tyr
      65           70           75           80
Leu Tyr Ala Val Arg Asp Arg Glu Met Phe Gly Tyr Met Lys Leu His
      85           90           95
Pro Glu Asp Phe Pro Glu Glu Asp Lys Lys Thr Tyr Gly Glu Ile Phe
      100          105          110
Glu Lys Phe His Pro Ile Arg
      115

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<210> 14676

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<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (367).. (1398)

<400> 14676

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<210> 14677
 <211> 344
 <212> PRT
 <213> Homo sapiens

<400> 14677

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			20					25					30		
Thr	Ala	Pro	Lys	Ser	Glu	Trp	Glu	Ala	Ser	Pro	Gly	Gly	Leu	Asp	Arg
			35					40					45		
Gly	Thr	Thr	Ser	Thr	Leu	Gly	Ala	Ile	Phe	Ile	Val	Val	Asn	Ala	Cys
			50					55					60		
Leu	Gly	Ala	Gly	Leu	Leu	Asn	Phe	Pro	Ala	Ala	Phe	Ser	Thr	Ala	Gly
			65					70					75		80
Gly	Val	Ala	Ala	Gly	Ile	Ala	Leu	Gln	Met	Gly	Met	Leu	Val	Phe	Ile
			85					90						95	
Ile	Ser	Gly	Leu	Val	Ile	Leu	Ala	Tyr	Cys	Ser	Gln	Ala	Ser	Asn	Glu
			100					105					110		
Arg	Thr	Tyr	Gln	Glu	Val	Val	Trp	Ala	Val	Cys	Gly	Lys	Leu	Thr	Gly
			115					120					125		
Val	Leu	Cys	Glu	Val	Ala	Ile	Ala	Val	Tyr	Thr	Phe	Gly	Thr	Cys	Ile
			130					135					140		
Thr	Phe	Leu	Ile	Ile	Ile	Gly	Asp	Gln	Gln	Asp	Lys	Ile	Ile	Ala	Val
			145					150					155		160
Met	Ala	Lys	Glu	Pro	Glu	Gly	Ala	Ser	Gly	Pro	Trp	Tyr	Thr	Asp	Arg
			165					170						175	
Lys	Phe	Thr	Ile	Ser	Leu	Thr	Ala	Phe	Leu	Phe	Ile	Leu	Pro	Leu	Ser
			180					185					190		
Ile	Pro	Arg	Glu	Ile	Gly	Phe	Gln	Lys	Tyr	Ala	Ser	Phe	Leu	Ser	Val
			195					200					205		
Val	Gly	Thr	Trp	Tyr	Val	Thr	Ala	Ile	Val	Ile	Ile	Lys	Tyr	Ile	Trp

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210	215	220
Pro Asp Lys Glu Met Thr	Pro Gly Asn Ile Leu	Thr Arg Pro Ala Ser
225	230	235
Trp Met Ala Val Phe Asn Ala Met Pro Thr Ile Cys Phe Gly Phe Gln		240
	245	250
Cys His Val Ser Ser Val Pro Val Phe Asn Ser Met Gln Gln Pro Glu		255
	260	265
Val Lys Thr Trp Gly Gly Val Val Thr Ala Ala Met Val Ile Ala Leu		270
	275	280
Ala Val Tyr Met Gly Thr Gly Ile Cys Gly Phe Leu Thr Phe Gly Ala		285
	290	295
Ala Val Asp Pro Asp Val Leu Leu Ser Tyr Pro Ser Glu Asp Met Ala		300
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Val Ala Val Ala Arg Ala Phe Ile Ile Leu Ser Val Leu Thr Ser Tyr		320
	325	330
Pro Ile Leu His Phe Cys Gly Arg		335
	340	

<210> 14678
 <211> 1407
 <212> DNA
 <213> Homo sapiens

<400> 14678

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Lys	Thr	Arg	Leu	Met	Leu	Gln	Tyr	Asp	Ala	Val	Val	Asn	Ser	Pro	His
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260 265 270
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<400> 14689

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		20						25					30		
Glu	Val	Gly	Arg	Asp	Asp	Asn	Ser	Lys	Lys	Ile	Met	Glu	Asn	Ser	Gly
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	50					55				60					
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Glu Cys His Ser Lys Gln Glu Leu Glu Ala Asp Val Ser His Lys Glu
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Lys Pro Asn Glu Tyr Ser Lys Asn Leu Glu Lys Thr Asn Arg Lys Ser
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Pro Gln Thr Ala Ser Glu Leu Ile Gly Asn Glu Leu Ala Ile Lys Lys
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755 760 765
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<212> PRT

<213> Homo sapiens

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-8486/13211-

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Val Cys Ile Gly Met Ala Ser Thr Phe Ala Tyr Ala Asn Ser Thr Leu
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Arg Glu Gln Val Ser Leu Lys Glu Lys Arg Ser Val Leu Val Ile Leu
115 120 125
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Ala Leu Pro Lys Ile Ile Leu Ala Val Lys Ser Lys Gly Lys Phe Tyr
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Gln Leu Trp Tyr Lys Tyr Ile Met Gly Asp Asp Ser Ser Asn Ser Tyr
225 230 235 240
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Glu Ala Gly Asp Ile Cys Ala Ile Cys Gln Ala Glu Phe Arg Glu Pro
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<212> DNA

<213> Homo sapiens

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 35 40 45
 Val Pro Gln Ser Glu Lys Ser Glu Ser Thr Pro Gly Val Lys Leu Thr
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Glu Val Phe Lys Ala Thr Ser His Leu Pro Lys His Ser Leu Ser Thr
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85 90 95
His Lys Glu Thr Phe Gln Val Arg Glu Cys Phe Gly Asn Thr Pro Asn
100 105 110
Cys Pro Ser Ser Ser Ser Thr Asn Asp Phe Gln Ala Asn Ser Gly Ala
115 120 125
Ile Asp Ala Phe Cys Gln Pro Glu Leu Asp Ser Ile Ser Thr Cys Pro
130 135 140
Asn Glu Thr Val Ser Leu Thr Thr Tyr Phe Ser Val Asp Ser Cys Met
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Thr Asp Thr Tyr Arg Leu Lys Tyr His Gln Arg Pro Lys Leu Ser Phe
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Pro Glu Ser Ser Gly Phe Cys Asn Asn Ser Leu Ser
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35 40 45
Val Cys Glu Ile Phe Arg Leu His Phe Arg Gln Leu Cys Tyr His Glu
50 55 60
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65 70 75 80
Trp Trp Leu Met Pro Glu Val His Thr Lys Glu Gln Ile Leu Glu Leu
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Leu Val Leu Glu Gln Phe Leu Ser Ile Leu Pro Gly Glu Leu Arg Thr
100 105 110
Trp Val Gln Leu His His Pro Glu Ser Gly Glu Glu Ala Val Ala Val
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Val Glu Asp Phe Gln Arg His Leu Ser Gly Ser Glu Glu Val Ser Ala
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<213> Homo sapiens

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<211> 1880

<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 14701

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			20					25				30			
Leu	Gln	Glu	Lys	Met	Ala	His	Val	Glu	Glu	Leu	Arg	Leu	Ile	His	Ala
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-8495/13211-

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130 135 140
Ala Arg Lys Gln Asp Thr Arg Gln Thr Ala Thr Phe Arg Gln Gln Pro
145 150 155 160
Pro Pro Met Lys Ala Cys Leu Ser Cys His Gln Gln Ile His Arg Asn
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<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 14703

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			20					25					30		
Tyr	Ser	Asp	Leu	Asp	Ser	Glu	Glu	Pro	Gly	Thr	Gly	Gly	Ala	Ala	Ser
		35				40						45			
Arg	Arg	Gly	Gln	Pro	Pro	Ala	Gly	Ala	Arg	Asp	Ser	Gly	Arg	Asp	Val
	50					55				60					
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65					70				75					80	
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145					150					155					160
Thr	Ser	Gly	Trp	Asp	Ser	Ser	Pro	Gly	Ala	Gly	Phe	Gln	Val	Pro	Glu
			165					170						175	
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<210> 14704
<211> 2365
<212> DNA
<213> Homo sapiens

<220>
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<222> (1533).. (1892)

<400> 14704

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<211> 120

<212> PRT

<213> Homo sapiens

<400> 14705

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50 55 60
Ser Leu Ile Lys Cys Asn Leu Ser Pro Lys Tyr Leu Trp Asn Leu Ser
65 70 75 80
Ser Phe Leu Gln Val Thr Ile Thr Ser Cys Leu Asn Cys Tyr Gly Asn
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<210> 14706

<211> 2738

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (104).. (958)

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0092459 "072300

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 14707

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10

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-8500/13211-

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 <212> DNA
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<211> 285

<212> PRT

09629469.072300

<213> Homo sapiens

<400> 14709

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<213> Homo sapiens

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09629469-072800

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<212> PRT

<213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

<400> 14712

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09629469.072800

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<212> DNA
<213> Homo sapiens

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<222> (355).. (1527)

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<212> DNA

<213> Homo sapiens

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<222> (899).. (2611)

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<211> 2445

<212> DNA

<213> Homo sapiens

<400> 14731

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<213> Homo sapiens

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<222> (274).. (687)

<400> 14732

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<212> PRT

<213> Homo sapiens

<400> 14733

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<211> 2599

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<400> 14739

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Leu Gly Gly Gly Arg Glu Val Trp Phe Gly Phe His Gln Ser Val Arg
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Cys Gly Thr Met Arg Arg Lys Tyr Arg Val Cys Asn Val Thr Arg Arg
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His Thr Tyr Leu Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg
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Pro Met Leu Gln Tyr Gly Gly Arg Asn Arg Thr Val Ala Thr Pro Ser
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<212> PRT

<213> Homo sapiens

<400> 14743

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<213> Homo sapiens

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Cys	Arg	His	Leu	Glu	Leu	Tyr	Asn	Gln	Phe	Ala	Ala	Asn	Ser	Glu	Arg
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 <211> 579
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<400> 14747

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Ala	Val	Arg	Val	Leu	Trp	Gly	Gly	Leu	Ser	Leu	Leu	Arg	Val	Leu	Trp
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Cys	Leu	Leu	Pro	Gln	Thr	Gly	Tyr	Val	His	Pro	Asp	Glu	Phe	Phe	Gln
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Glu	Ala	Leu	Val	Leu	Leu	Pro	Gly	Ala	Thr	Leu	Thr	Ala	Ala	Val	Phe	260	265	270	
Val	Ala	Thr	Asp	Ser	Trp	Tyr	Phe	Ser	Ser	Pro	Ala	Thr	Ser	Arg	Asn	275	280	285	
Leu	Val	Leu	Thr	Pro	Val	Asn	Phe	Leu	His	Tyr	Asn	Leu	Asn	Pro	Gln	290	295	300	
Asn	Leu	Ala	Arg	His	Gly	Thr	His	Ala	Arg	Leu	Thr	His	Leu	Ala	Val	305	310	315	320
Asn	Gly	Phe	Leu	Leu	Phe	Gly	Val	Leu	His	Ala	Gln	Ala	Leu	Gln	Ala	325	330	335	
Ala	Trp	Gln	Gln	Leu	Gln	Val	Gly	Leu	Gln	Ala	Ser	Ala	Gln	Met	Gly	340	345	350	
Leu	Leu	Arg	Ala	Leu	Gly	Ala	Arg	Ser	Leu	Leu	Ser	Ser	Pro	Arg	Ser	355	360	365	
Tyr	Leu	Leu	Leu	Leu	Tyr	Phe	Met	Pro	Leu	Ala	Leu	Leu	Ser	Ala	Phe	370	375	380	
Ser	His	Gln	Glu	Ala	Arg	Phe	Leu	Ile	Pro	Leu	Leu	Val	Pro	Leu	Val	385	390	395	400
Leu	Leu	Cys	Ser	Pro	Gln	Thr	Gln	Pro	Val	Pro	Trp	Lys	Gly	Thr	Val	405	410	415	
Val	Leu	Phe	Asn	Ala	Leu	Gly	Ala	Leu	Leu	Phe	Gly	Cys	Leu	His	Gln	420	425	430	
Gly	Gly	Leu	Val	Pro	Gly	Leu	Glu	Tyr	Leu	Glu	Gln	Val	Val	His	Ala	435	440	445	
Pro	Val	Leu	Pro	Ser	Thr	Pro	Thr	His	Tyr	Thr	Leu	Leu	Phe	Thr	His	450	455	460	
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Ser	Gly	Ala	Trp	Arg	Asp	His	Leu	Ser	Leu	His	Ile	Val	Glu	Leu	Gly	565	570	575	
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<213> Homo sapiens

<400> 14749

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35 40 45
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50 55 60
Ser Gly Ala Phe Ile Ala Gly Val Ala Val Tyr Cys Tyr Arg Asp Met
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Phe Val Arg Lys Asn Arg Lys Ile His Lys Asp Ala Glu Ser Ala Gln
85 90 95
Ser Cys Thr Asp Ser Ser Gly Ser Phe Ala Lys Leu Asn Gly Leu Phe
100 105 110
Asp Ser Pro Val Lys Glu Tyr Gln Gln Asn Ile Asp Ser Pro Lys Leu
115 120 125
Tyr Ser Asn Leu Leu Thr Ser Arg Lys Glu Leu Pro Pro Asn Gly Asp
130 135 140
Thr Lys Ser Met Val Met Asp His Arg Gly Gln Pro Pro Glu Leu Ala
145 150 155 160
Ala Leu Pro Thr Pro Glu Ser Thr Pro Val Leu His Gln Lys Thr Leu
165 170 175
Gln Ala Met Lys Ser His Ser Glu Lys Ala His Gly His Gly Ala Ser
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Arg Lys Glu Thr Pro Gln Phe Phe Pro Ser Ser Pro Pro Pro His Ser
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Pro Leu Ser His Gly His Ile Pro Ser Ala Ile Val Leu Pro Asn Ala
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Thr His Asp Tyr Asn Thr Ser Phe Ser Asn Ser Asn Ala His Lys Ala
225 230 235 240
Glu Lys Lys Leu Gln Asn Ile Asp His Pro Leu Thr Lys Ser Ser Ser
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Lys Arg Asp His Arg Arg Ser Val Asp Ser Arg Asn Thr Leu Asn Asp
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Leu Leu Lys His Leu Asn Asp Pro Asn Ser Asn Pro Lys Ala Ile Met
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 Asp Val Pro Thr Pro Gly Val Pro Met Thr Ser Leu Glu Arg Gln
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Lys Gln Asn Val Asp Gly Leu Val Leu Asp Thr Leu Ala Val Ile Arg
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Thr Leu Leu Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln
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Lys Leu Thr Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp
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Leu	Cys	Cys	Asp	Glu	Val	Ala	Asp	Thr	Gln	Leu	Lys	Pro	Cys	Gly	His
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Ser	Asp	Leu	Cys	Met	Asp	Cys	Ala	Leu	Gln	Leu	Glu	Thr	Cys	Pro	Leu
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Cys	Arg	Lys	Glu	Ile	Val	Ser	Arg	Ile	Arg	Gln	Ile	Ser	His	Ile	Ser
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<400> 14754

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<400> 14755

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<210> 14756

<211> 109

<212> PRT

<213> Homo sapiens

<400> 14756

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<400> 14765
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 Val Ile Gly Trp Lys Lys Ser Glu Gly Ser Pro Pro Pro Glu Glu Pro
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-8570/13211-

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325 330 335
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Tyr His Ser Thr Leu Pro Pro Arg Ala His Pro Ala Pro Ser Met Gly
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Gln Arg Val Ala Ser Phe Cys Thr Leu Thr Asp Met Gln His Gly Gln
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009270 6946360

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<212> PRT
<213> Homo sapiens

<400> 14767

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<212> DNA

<213> Homo sapiens

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<221> CDS

<222> (155).. (790)

<400> 14768

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<400> 14769
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Arg Thr Gln Val Gly Ser Gly Glu Ala Val Thr Glu Glu Ser Pro Ala
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Pro Pro Asn Glu Ala Tyr Thr Asn Asn Gln Ala Asp Ile Ala Thr Gln
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<212> DNA
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<222> (23).. (1900)

<400> 14770

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 <212> PRT
 <213> Homo sapiens

<400> 14771

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Gln	Asp	Glu	Ile	Gln	Arg	Val	Thr	Asn	Ile	Lys	Thr	Ser	Ala	Lys	Ile
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Val	Leu	Ser	Ala	Ala	Ala	Asp	Ser	Ile	Lys	Ile	Trp	Asn	Arg	Ser	Thr
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Leu	Gln	Leu	Tyr	Asp	Leu	Ala	Ser	Gly	Asn	Leu	Leu	Glu	Thr	Ile	Asp
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Ala	His	Asp	Gly	Ala	Leu	Trp	Ser	Met	Ser	Leu	Ser	Pro	Asp	Gln	Arg
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Gly	Phe	Val	Thr	Gly	Gly	Ala	Asp	Lys	Ser	Val	Lys	Phe	Trp	Asp	Phe
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Glu	Leu	Val	Lys	Asp	Glu	Asn	Ser	Thr	Gln	Lys	Arg	Leu	Ser	Val	Lys
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Phe	Gly	Asp	Cys	His	Lys	Ser	Leu	Phe	Ala	His	Asp	Asp	Ser	Val	Met
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Tyr	Leu	Gln	Phe	Val	Pro	Lys	Ser	His	Leu	Phe	Phe	Thr	Ala	Gly	Lys
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Asp	His	Lys	Ile	Lys	Gln	Trp	Asp	Ala	Asp	Lys	Phe	Glu	His	Ile	Gln
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Thr	Leu	Glu	Gly	His	His	Gln	Glu	Ile	Trp	Cys	Leu	Ala	Val	Ser	Pro
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 Trp Glu Arg Thr Arg Glu Pro Leu Ile Leu Glu Glu Glu Arg Glu Met
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 405 410 415
 Ala Val Pro Gly Glu Thr Gln Gly Asp Ser Tyr Phe Thr Gly Lys Lys
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 Thr Ile Glu Thr Val Lys Ala Ala Glu Arg Ile Met Glu Ala Ile Glu
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 Leu Tyr Arg Glu Glu Thr Ala Lys Met Lys Glu His Lys Ala Ile Cys
 450 455 460
 Lys Ala Ala Gly Lys Glu Val Pro Leu Pro Ser Asn Pro Ile Leu Met
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 Ala Tyr Gly Ser Ile Ser Pro Ser Ala Tyr Val Leu Glu Ile Phe Lys
 485 490 495
 Gly Ile Lys Ser Ser Glu Leu Glu Glu Ser Leu Leu Val Leu Pro Phe
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 Ser Tyr Val Pro Asp Ile Leu Lys Leu Phe Asn Glu Phe Ile Gln Leu
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 Gly Ser Asp Val Glu Leu Ile Cys Arg Cys Leu Phe Phe Leu Leu Arg
 530 535 540
 Ile His Phe Gly Gln Ile Thr Ser Asn Gln Met Leu Val Pro Val Ile
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 Glu Lys Leu Arg Glu Thr Thr Ile Ser Lys Val Ser Gln Val Arg Asp
 565 570 575
 Val Ile Gly Phe Asn Met Ala Gly Leu Asp Tyr Leu Lys Arg Glu Cys
 580 585 590
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<212> DNA

<213> Homo sapiens

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<222> (70).. (1095)

<400> 14772

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 <212> PRT
 <213> Homo sapiens

<400> 14773

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			20					25					30		
Ala	Ala	Arg	Tyr	Arg	Ser	Asp	Gly	Ala	Leu	Leu	Leu	Gly	Ala	Ser	Ser
		35					40					45			
Leu	Ser	Gly	Arg	Cys	Trp	Ala	Gly	Ser	Leu	Trp	Leu	Phe	Lys	Asp	Pro
	50					55				60					
Cys	Ala	Ala	Pro	Asn	Glu	Gly	Phe	Cys	Ser	Ala	Gly	Val	Gln	Thr	Glu
	65				70				75					80	
Ala	Gly	Val	Ala	Asp	Leu	Thr	Trp	Val	Gly	Glu	Arg	Gly	Ile	Leu	Val
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 <211> 1385
 <212> DNA
 <213> Homo sapiens

<400> 14774

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 <213> Homo sapiens

<400> 14775

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			20					25					30		
Lys	Ala	Ser	Asn	Val	Leu	Glu	Glu	Ile	Ala	Lys	Asp	Lys	Val	Leu	Lys
			35				40					45			
Asp	Phe	Tyr	Val	His	Thr	Val	Met	Thr	Cys	Tyr	Phe	Ser	Leu	Phe	Gly
	50				55						60				
Ile	Asp	Asn	Met	Ala	Pro	Ser	Pro	Gly	His	Ile	Leu	Arg	Val	Tyr	Gly
	65				70					75					80
Gly	Val	Leu	Pro	Trp	Ser	Val	Ala	Leu	Asp	Trp	Leu	Thr	Glu	Lys	Pro
			85					90					95		
Glu	Leu	Phe	Gln	Leu	Ala	Leu	Lys	Ala	Phe	Arg	Tyr	Thr	Leu	Lys	Leu
			100					105					110		
Met	Ile	Asp	Lys	Ala	Ser	Leu	Gly	Pro	Ile	Glu	Asp	Phe	Arg	Glu	Leu
		115					120				125				
Ile	Lys	Tyr	Leu	Glu	Glu	Tyr	Glu	Arg	Asp	Trp	Tyr	Ile	Gly	Leu	Val
	130					135					140				
Ser	Asp	Glu	Lys	Trp	Lys	Glu	Ala	Ile	Leu	Gln	Glu	Lys	Pro	Tyr	Leu
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				165						170					175				
Leu	Ser	Leu	Gln	Glu	Leu	Leu	Ile	Gln	Val	Gly	Lys	Leu	Asn	Pro	Glu				
			180					185					190						
Ala	Val	Arg	Gly	Gln	Trp	Ala	Asn	Leu	Ser	Trp	Glu	Leu	Leu	Tyr	Ala				
		195					200					205							
Thr	Asn	Asp	Asp	Glu	Glu	Arg	Tyr	Ser	Ile	Gln	Ala	His	Pro	Leu	Leu				
	210					215					220								
Leu	Arg	Asn	Leu	Thr	Val	Gln	Ala	Ala	Glu	Pro	Pro	Leu	Gly	Tyr	Pro				
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<210> 14776
 <211> 1782
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (110).. (1510)

<400> 14776

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<211> 467

<212> PRT

<213> Homo sapiens

<400> 14777

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35 40 45
Val Ala Phe Leu Gln Gly Leu Arg Asp Asp Gly Phe Gln Pro Thr Ile
50 55 60
Leu Arg Ser Gly Asp Val Tyr Gly Tyr Ser Ser Cys Thr Ala Asn Pro
65 70 75 80
Pro Ser Gln Thr Lys Leu Gln Ala Arg Ala Pro Asn Pro Thr Ala Thr
85 90 95
Ser Pro Pro Ala Ser Ala Pro Arg Thr Ala Met Arg Leu Pro Ala Gly
100 105 110
Arg Ala Thr Leu Leu Pro Met Pro Leu Ser Gly Arg Leu Ala Lys Ala
115 120 125
Ser Thr Pro Ala Leu Ala Lys His Ala Thr Thr Asn Leu Leu Leu Ser
130 135 140
Ser Leu Lys Gln Ser Ser Ala Ser His Ala Arg Gly Ala Ala Val Gly
145 150 155 160
Phe Pro Thr His Leu Tyr Pro Gly Val Tyr Pro Ala Met Arg Leu Ser
165 170 175
Val Val Leu Glu Ala Leu Val Pro Leu Lys Thr Pro Met Pro Cys Leu
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Gly Ala Lys His Lys Ala Gln Ser Leu Gln Leu Ser Leu Ala Asp Ser
195 200 205
Pro Leu Lys Leu Arg Lys Ser Ser Gly Lys Gly Pro Gly Asn Pro Arg
210 215 220
Pro Lys Ala Pro Arg Lys Thr Thr Ser Lys Gly Pro Lys Cys Leu Thr
225 230 235 240
Arg Lys Gly Pro Gly Ala Gly Pro Arg Arg Gly Ser Gly His Gln Ser
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Lys Thr Asn Arg Ala Thr Gly Ser Pro Ser Val Arg Arg Met Lys Gly
260 265 270
Gly Ser Ala Leu Gly Thr Lys Thr Ala Gln Ala Lys Val Ala Arg Thr

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<220>
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Ile Ser Lys Arg Phe Lys Ser His Thr Asp Gln Leu Val Leu Ile Phe
          65             70             75             80
Ala Gly Lys Ile Leu Lys Asp Gln Asp Thr Leu Ser Gln His Gly Ile
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His Asp Gly Leu Thr Val His Leu Val Ile Lys Thr Gln Asn Arg Pro
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Gln Asp His Ser Ala Gln Gln Thr Asn Thr Ala Gly Ser Asn Val Thr
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Pro Leu Val Gln Ser Met Leu Ser Asn Pro Asp Leu Met Arg Gln Leu
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			20					25					30		
Arg	Lys	His	Glu	Leu	Leu	Ala	Lys	Ala	Leu	His	Leu	Leu	Lys	Ser	Ser
		35					40				45				
Cys	Ala	Pro	Ser	Val	Gln	Met	Lys	Ile	Lys	Glu	Leu	Tyr	Arg	Arg	Arg
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Phe	Pro	Arg	Lys	Thr	Leu	Gly	Pro	Ser	Asp	Leu	Ser	Leu	Leu	Ser	Leu
65					70				75					80	
Pro	Pro	Gly	Thr	Ser	Pro	Val	Gly	Ser	Pro	Gly	Pro	Leu	Ala	Pro	Ile
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Pro	Pro	Thr	Leu	Leu	Ala	Pro	Gly	Thr	Leu	Leu	Gly	Pro	Lys	Arg	Glu
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Val	Asp	Met	His	Pro	Pro	Leu	Pro	Gln	Pro	Val	His	Pro	Asp	Val	Thr
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Met	Lys	Pro	Leu	Pro	Phe	Tyr	Glu	Val	Tyr	Gly	Glu	Leu	Ile	Arg	Pro

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130		135		140
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Thr Phe Ala Leu Thr	Pro Gln Gln Val Gln Gln Ile Leu Thr Ser Arg			
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Glu Val Leu Pro Gly Ala Lys Cys Asp Tyr Thr Ile Gln Val Gln Leu				
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Arg Phe Cys Leu Cys Glu Thr Ser Cys Pro Gln Glu Asp Tyr Phe Pro				
195	200	205		
Pro Asn Leu Phe Val Lys Val Asn Gly Lys Leu Cys Pro Leu Pro Gly				
210	215	220		
Tyr Leu Pro Pro Thr Lys Asn Gly Ala Glu Pro Lys Arg Pro Ser Arg				
225	230	235	240	
Pro Ile Asn Ile Thr Pro Pro Ala Arg Leu Ser Ala Thr Val Pro Asn				
245	250	255		
Thr Ile Val Val Asn Trp Ser Ser Glu Phe Gly Arg Asn Tyr Ser Leu				
260	265	270		
Ser Val Tyr Leu Val Arg Gln Leu Thr Ala Gly Thr Leu Leu Gln Lys				
275	280	285		
Leu Arg Ala Lys Gly Ile Arg Asn Pro Asp His Ser Arg Ala Leu Ile				
290	295	300		
Lys Glu Lys Leu Thr Ala Asp Pro Asp Ser Glu Val Ala Thr Thr Ser				
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Leu Arg Val Ser Leu Met Cys Pro Leu Gly Lys Met Arg Leu Thr Val				
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340	345	350		
Leu Tyr Leu Gln Met Asn Glu Lys Lys Pro Thr Trp Thr Cys Pro Val				
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Cys Asp Lys Lys Ala Pro Tyr Glu Ser Leu Ile Ile Asp Gly Leu Phe				
370	375	380		
Met Glu Ile Leu Ser Ser Cys Ser Asp Cys Asp Glu Ile Gln Phe Met				
385	390	395	400	
Glu Asp Gly Ser Trp Cys Pro Met Lys Pro Lys Lys Glu Ala Ser Glu				
405	410	415		
Val Cys Pro Pro Pro Gly Tyr Gly Leu Asp Gly Leu Gln Tyr Ser Pro				
420	425	430		
Val Gln Gly Gly Asp Pro Ser Glu Asn Lys Lys Lys Val Glu Val Ile				
435	440	445		
Asp Leu Thr Ile Glu Ser Ser Ser Asp Glu Glu Asp Leu Pro Pro Thr				
450	455	460		
Lys Lys His Cys Ser Val Thr Ser Ala Ala Ile Pro Ala Leu Pro Gly				
465	470	475	480	
Ser Lys Gly Val Leu Thr Ser Gly His Gln Pro Ser Ser Val Leu Arg				
485	490	495		
Ser Pro Ala Met Gly Thr Leu Gly Gly Asp Phe Leu Ser Ser Leu Pro				
500	505	510		
Leu His Glu Tyr Pro Pro Ala Phe Pro Leu Gly Ala Asp Ile Gln Gly				

000220-69462950

515 520 525
 Leu Asp Leu Phe Ser Phe Leu Gln Thr Glu Ser Gln His Tyr Gly Pro
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 545 550 555 560
 Gln Tyr Arg Gly Thr Pro Ser His Phe Leu Gly Pro Leu Ala Pro Thr
 565 570 575
 Leu Gly Ser Ser His Cys Ser Ala Thr Pro Ala Pro Pro Pro Gly Arg
 580 585 590
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 <212> PRT
 <213> Homo sapiens

<400> 14785

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			20					25					30		
Ala	Gly	Lys	Met	Leu	Ala	Ile	Ser	Leu	Val	His	Gly	Gly	Pro	Ser	Pro
		35				40					45				
Gly	Phe	Phe	Ser	Lys	Thr	Leu	Phe	Asn	Cys	Leu	Val	Tyr	Gly	Pro	Glu
	50				55					60					
Asn	Thr	Gln	Pro	Ile	Leu	Asp	Asp	Val	Ser	Asp	Phe	Asp	Val	Ala	Gln
	65				70				75					80	
Ile	Ile	Ile	Arg	Ile	Asn	Thr	Ala	Thr	Thr	Val	Ala	Asp	Leu	Lys	Ser
			85					90						95	
Ile	Ile	Asn	Glu	Cys	Tyr	Asn	Tyr	Leu	Glu	Leu	Ile	Gly	Cys	Leu	Arg
		100						105				110			
Leu	Ile	Thr	Thr	Leu	Ser	Asp	Lys	Tyr	Met	Leu	Val	Lys	Asp	Ile	Leu
		115					120					125			
Gly	Tyr	His	Val	Ile	Gln	Arg	Val	His	Thr	Pro	Phe	Glu	Ser	Phe	Lys
	130					135					140				
Gln	Gly	Leu	Lys	Thr	Leu	Gly	Val	Leu	Glu	Lys	Ile	Gln	Ala	Tyr	Pro
	145				150					155				160	
Glu	Ala	Phe	Cys	Ser	Ile	Leu	Cys	His	Lys	Pro	Glu	Ser	Leu	Ser	Ala

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165 170 175
Lys Ile Leu Ser Glu Leu Phe Thr Val His Thr Leu Pro Asp Val Lys
180 185 190
Ala Leu Gly Phe Trp Asn Ser Tyr Leu Gln Ala Val Glu Asp Gly Lys
195 200 205
Ser Thr Ala Thr Met Glu Asp Ile Leu Ile Phe Ala Thr Gly Cys Ser
210 215 220
Ser Ile Pro Pro Ala Gly Phe Lys Pro Thr Pro Ser Ile Glu Cys Leu
225 230 235 240
His Val Asp Phe Pro Val Gly Asn Lys Cys Asn Asn Cys Leu Ala Ile
245 250 255
Pro Ile Thr Asn Thr Tyr Lys Glu Phe Gln Glu Asn Met Asp Phe Thr
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Gly His
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<213> Homo sapiens

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<210> 14787
 <211> 306
 <212> PRT
 <213> Homo sapiens

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          20             25             30
Asp Glu Tyr Gln Ile Leu Ala Arg His Leu Gln Lys Glu Ala Gln Ala
          35             40             45
Gln His Asn Asn Ser Glu Phe Thr Glu Glu Gln Lys Lys Thr Ile Gly
          50             55             60
Lys Ile Ala Thr Cys Leu Glu Leu Arg Ser Ala Ala Leu Gln Ser Thr
          65             70             75             80
Gln Ser Gln Glu Glu Phe Lys Leu Glu Asp Leu Lys Lys Leu Glu Pro
          85             90             95
Ile Leu Lys Asn Ile Leu Thr Tyr Asn Lys Glu Phe Pro Phe Asp Val
          100            105            110
Gln Pro Val Pro Leu Arg Arg Ile Leu Ala Pro Gly Glu Glu Glu Asn
          115            120            125
Leu Gly Phe Glu Glu Asp Glu Glu Gly Gly Ala Gly Ala Gly Ser

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<211> 1026

<212> PRT

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<213> Homo sapiens

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			20					25					30		
Val	Leu	Ala	Pro	Ala	Pro	Pro	Val	Tyr	Glu	Ala	Val	Ser	Glu	Thr	Met
		35					40					45			
Gln	Ser	Ala	Thr	Gly	Ile	Gln	Tyr	Ser	Val	Thr	Pro	Ser	Tyr	Gln	Val
	50					55					60				
Ser	Ala	Met	Pro	Gln	Ser	Ser	Gly	Ser	His	Gly	Pro	Ala	Ile	Ala	Ala
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Val	His	Ser	Ser	His	His	Pro	Thr	Ala	Val	Gln	Pro	His	Gly	Gly	
				85				90					95		
Gln	Val	Val	Gln	Ser	His	Ala	His	Pro	Ala	Pro	Pro	Val	Ala	Pro	Val
			100					105					110		
Gln	Gly	Gln	Gln	Gln	Phe	Gln	Arg	Leu	Lys	Val	Glu	Asp	Ala	Leu	Ser
	115					120					125				
Tyr	Leu	Asp	Gln	Val	Lys	Leu	Gln	Phe	Gly	Ser	Gln	Pro	Gln	Val	Tyr
	130				135						140				
Asn	Asp	Phe	Leu	Asp	Ile	Met	Lys	Glu	Phe	Lys	Ser	Gln	Ser	Ile	Asp
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Thr	Pro	Gly	Val	Ile	Ser	Arg	Val	Ser	Gln	Leu	Phe	Lys	Gly	His	Pro
				165					170					175	
Asp	Leu	Ile	Met	Gly	Phe	Asn	Thr	Phe	Leu	Pro	Pro	Gly	Tyr	Lys	Ile
			180					185					190		
Glu	Val	Gln	Thr	Asn	Asp	Met	Val	Asn	Val	Thr	Thr	Pro	Gly	Gln	Val
		195				200						205			
His	Gln	Ile	Pro	Thr	His	Gly	Ile	Gln	Pro	Gln	Pro	Gln	Pro	Pro	Pro
	210					215					220				
Gln	His	Pro	Ser	Gln	Pro	Ser	Ala	Gln	Ser	Ala	Pro	Ala	Pro	Ala	Gln
225					230					235					240
Pro	Ala	Pro	Gln	Pro	Pro	Pro	Ala	Lys	Val	Ser	Lys	Pro	Ser	Gln	Leu
				245					250					255	
Gln	Ala	His	Thr	Pro	Ala	Ser	Gln	Gln	Thr	Pro	Pro	Leu	Pro	Pro	Tyr
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785 790 795 800
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Thr His Ile Thr Ile Pro Glu Ser Leu Arg Gln Gly Lys Val Glu Asp
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Pro Pro Gln Pro Val Val Leu Met Pro Thr Val Tyr Gln Gln Gly Val
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<213> Homo sapiens

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Asn	Ile	Asn	Pro	Asp	Val	Leu	Phe	Glu	Val	His	Asn	Tyr	Asn	Ile	Thr
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Arg	Tyr	Thr	Pro	Ser	Met	Leu	Lys	Glu	Pro	Ala	Leu	Thr	Leu	Gly	Lys
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Asp	Val	Phe	Thr	Val	Glu	Glu	Lys	Ala	Gly	Arg	Ile	His	Ala	Val	Asp
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-8619/13211-

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-8623/13211-

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<213> Homo sapiens

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<400> 14806

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<212> PRT
<213> Homo sapiens

<400> 14807

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 <212> DNA
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<400> 14808

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 His Met Pro Lys Tyr Leu Arg Gln Lys Leu Arg Ala Glu Leu Lys Pro
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 Lys Thr Arg Ile Phe Glu Ile Gln Pro Ile Ser Gly Val Leu Asp Pro
 65 70 75 80
 Gly Glu Lys Ser Asn Val Gln Val Lys Phe Met Pro Lys Glu Glu Lys
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 Ser Pro Ser Val Leu Asp Leu Gly Pro Leu Leu Leu Cys Ala Pro Gly
 130 135 140
 Asp Glu Ala Glu Val Ile Val Lys Asn Pro Cys Asn Phe Pro Ile Glu
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Pro Leu Gln Pro Gly Leu Leu Trp Gly Pro Leu Glu Glu Glu Ser Ala			
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Ser Leu Gly Pro Trp Gly Asp Val Cys Ala Cys Glu Gln Ser Ser Gly			
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Gly Glu Asp Ala Ala Glu Pro Cys Ile Asp Pro Gly Ser Gln Ser Pro			
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Arg Ser Pro Pro Gly Pro Ala Gly Ser Ser Pro Lys Gln Gly Arg Arg			
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taactaacct aggtgggaaa accatgggtgc tgtttaattg taaatagatt gatataagat 2460
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<210> 14825
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 <212> PRT
 <213> Homo sapiens

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Gly Lys Asp Leu Lys Leu Val Val Arg Ser Thr Asp Thr Val Phe His
          35          40          45
Met Lys Arg Arg Leu His Ala Ala Glu Gly Val Glu Pro Gly Ser Gln
          50          55          60
Arg Trp Phe Phe Ser Gly Arg Pro Leu Thr Asp Lys Met Lys Phe Glu
          65          70          75          80
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 <212> DNA
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<222> (292).. (1467)

<400> 14826

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<211> 392
<212> PRT

09629469-072800

<213> Homo sapiens

<400> 14827

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			20					25					30		
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	50					55					60				
Leu	Ala	Leu	Arg	Ala	Asp	Tyr	Glu	Ile	Ala	Ser	Lys	Glu	Gln	Asp	Phe
65					70					75					80
Phe	Phe	Glu	Leu	Asp	Ala	Met	Asp	His	Leu	Gln	Ser	Phe	Ile	Ala	Asp
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Cys	Asp	Arg	Arg	Thr	Glu	Val	Ala	Lys	Lys	Arg	Leu	Ala	Glu	Thr	Gln
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Glu	Glu	Ile	Ser	Ala	Glu	Val	Ala	Ala	Lys	Ala	Glu	Arg	Val	His	Glu
		115					120					125			
Leu	Asn	Glu	Glu	Ile	Gly	Lys	Leu	Leu	Ala	Lys	Val	Glu	Gln	Leu	Gly
	130					135					140				
Ala	Glu	Gly	Asn	Val	Glu	Glu	Ser	Gln	Lys	Val	Met	Asp	Glu	Val	Glu
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Lys	Ala	Arg	Ala	Lys	Lys	Arg	Glu	Ala	Glu	Glu	Val	Tyr	Arg	Asn	Ser
				165					170					175	
Met	Pro	Ala	Ser	Ser	Phe	Gln	Gln	Gln	Lys	Leu	Arg	Val	Cys	Glu	Val
			180					185					190		
Cys	Ser	Ala	Tyr	Leu	Gly	Leu	His	Asp	Asn	Asp	Arg	Arg	Leu	Ala	Asp
		195					200					205			
His	Phe	Gly	Gly	Lys	Leu	His	Leu	Gly	Phe	Ile	Glu	Ile	Arg	Glu	Lys
	210					215					220				
Leu	Glu	Glu	Leu	Lys	Arg	Val	Val	Ala	Glu	Lys	Gln	Glu	Lys	Arg	Asn
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Gln	Glu	Arg	Leu	Lys	Arg	Arg	Glu	Glu	Arg	Glu	Arg	Glu	Glu	Arg	Glu
				245					250					255	
Lys	Leu	Arg	Arg	Ser	Arg	Ser	His	Ser	Lys	Asn	Pro	Lys	Arg	Ser	Arg
			260					265					270		
Ser	Arg	Glu	His	Arg	Arg	His	Arg	Ser	Arg	Ser	Met	Ser	Arg	Glu	Arg
		275					280					285			
Lys	Arg	Arg	Thr	Arg	Ser	Lys	Ser	Arg	Glu	Lys	Arg	His	Arg	His	Arg
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305					310					315					320
His	Ser	Ser	Arg	Asp	Arg	Ser	Arg	Glu	Arg	Ser	Lys	Arg	Arg	Ser	Ser
				325					330					335	
Lys	Glu	Arg	Phe	Arg	Asp	Gln	Asp	Leu	Ala	Ser	Cys	Asp	Arg	Asp	Arg
			340					345					350		
Ser	Ser	Arg	Asp	Arg	Ser	Pro	Arg	Asp	Arg	Asp	Arg	Lys	Asp	Lys	Lys

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385					390										

<210> 14828
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (115).. (1716)

<400> 14828

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tcccagcgag	agctggacac	agtcaccttg	gaggacatca	aggagcacgt	gaaacagcta	360
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<211> 534

<212> PRT

<213> Homo sapiens

<400> 14829

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			20					25						30	
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	50					55					60				
Arg	Glu	Leu	Asp	Thr	Val	Thr	Leu	Glu	Asp	Ile	Lys	Glu	His	Val	Lys
65					70				75						80
Gln	Leu	Glu	Lys	Ala	Val	Ser	Gly	Lys	Glu	Pro	Arg	Phe	Val	Leu	Arg
			85						90					95	
Ala	Leu	Arg	Met	Leu	Pro	Ser	Thr	Ser	Arg	Arg	Leu	Asn	His	Tyr	Val
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Leu	Tyr	Lys	Ala	Val	Gln	Gly	Phe	Phe	Thr	Ser	Asn	Asn	Ala	Thr	Arg
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Asp	Phe	Leu	Leu	Pro	Phe	Leu	Glu	Glu	Pro	Met	Asp	Thr	Glu	Ala	Asp
130						135				140					
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145					150					155					160
Pro	Glu	Val	Glu	Ala	Tyr	Leu	Gln	Leu	Leu	Val	Val	Ile	Phe	Met	Met
				165					170					175	
Asn	Ser	Lys	Arg	Tyr	Lys	Glu	Ala	Gln	Lys	Ile	Ser	Asp	Asp	Leu	Met
			180					185					190		
Gln	Lys	Ile	Ser	Thr	Gln	Asn	Arg	Arg	Ala	Leu	Asp	Leu	Val	Ala	Ala
		195					200					205			
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Arg	His	Asp	Ala	Asp	Gly	Gln	Ala	Thr	Leu	Leu	Asn	Leu	Leu	Leu	Arg
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			260					265					270		
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325 330 335
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Leu Lys Arg Ser Leu Met Pro Tyr Phe Leu Leu Thr Gln Ala Val Arg
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370 375 380
Lys Phe Gln Ala Asp Gly Thr Tyr Thr Leu Ile Ile Arg Leu Arg His
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Asn Val Ile Lys Thr Gly Val Arg Met Ile Ser Leu Ser Tyr Ser Arg
405 410 415
Ile Ser Leu Ala Asp Ile Ala Gln Lys Leu Gln Leu Asp Ser Pro Glu
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Asp Ala Glu Phe Ile Val Ala Lys Ala Ile Arg Asp Gly Val Ile Glu
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Ala Ser Ile Asn His Glu Lys Gly Tyr Val Gln Ser Lys Glu Met Ile
450 455 460
Asp Ile Tyr Ser Thr Arg Glu Pro Gln Leu Ala Phe His Gln Arg Ile
465 470 475 480
Ser Phe Cys Leu Asp Ile His Asn Met Ser Val Lys Ala Met Arg Phe
485 490 495
Pro Pro Lys Ser Tyr Asn Lys Asp Leu Glu Ser Ala Glu Glu Arg Arg
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<211> 2280

<212> DNA

<213> Homo sapiens

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<210> 14831
 <211> 2686
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (97).. (2223)

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gacattaacc agaaacttca aaaggttata cagtgggttg tggaagaaaa attgtgtgcg 240
ctgcagtgtg ctgtatttga taagactttg gcagaattga aaacacgagt ggaaaagatt 300
gaatgtaaca agaggcataa aacagttctc actgaactac aggccaagat agccagggtta 360

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 50 55 60
 Ser Leu Phe Ile Leu Gly His Leu Arg Thr Leu Met Glu Asn Gln His
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 Trp Asn Gln Leu Ile Gln Asp Ala Gln Lys Arg Gly Ala Ile Ile Lys
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 Thr Cys Asp Lys Asn Tyr Arg His Asp Ala Val Lys Ile Leu Lys Leu
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210 215 220
Pro Val Val His Gln Asp Leu Ser His Val Gln Gln Pro Ala Ala Val
225 230 235 240
Val Ala Ala Leu Ser Ser His Lys Pro Pro Val Arg Gly Glu Pro Pro
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Ala Ser Phe Ile Arg Leu Leu Asp Lys Ile Thr Asn Gly Ser Arg Ile
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305 310 315 320
Ser Pro Tyr Thr Ile Glu Phe Leu Arg His Leu Lys Ser Phe Phe Gln
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09629469 . 072800


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<213> Homo sapiens

<400> 14842

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Phe Glu Arg Trp Met Glu Trp Gln Pro Glu Glu Gln Ala Trp His Ser
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Tyr Ile Asn Phe Glu Leu Arg Tyr Lys Glu Val Asp Arg Ala Arg Thr
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-8674/13211-

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Gln Ile Tyr Glu Glu Ala Asn Lys Thr Met Arg Asn Cys Glu Glu Lys
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<222> (1).. (2220)

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 <213> Homo sapiens

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Gln	Lys	Lys	Phe	Glu	Lys	Met	Ala	Lys	Glu	Leu	Gln	Arg	Gln	Lys	Thr
			35				40					45			
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Leu	Ile	Tyr	Thr	Pro	Thr	Ile	Glu	Ile	Asn	Ser	Ser	His	His	Ser	Ala
65					70				75					80	
Met	Glu	Lys	Arg	Leu	Gln	Glu	Met	Lys	Glu	Lys	Arg	Glu	Asn	Leu	Ser
			85					90						95	
Pro	Thr	Ser	Ser	Gln	Met	Ile	Gln	Gln	Ser	His	Asp	Asn	Pro	Ser	Asn
			100				105						110		
Ser	Leu	Cys	Glu	Ala	Pro	Leu	Asn	Ile	Ser	Arg	Asp	Thr	Leu	Cys	Ser
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Asp	Glu	Tyr	Phe	Ala	Gly	Gly	Leu	His	Ser	Ser	Phe	Asp	Asp	Leu	Cys
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Gly	Asn	Ser	Gly	Cys	Gly	Asn	Gln	Glu	Arg	Lys	Leu	Glu	Gly	Ser	Ile
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-8677/13211-

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Lys	Glu	Lys	Cys	Lys	Arg	Lys	Arg	Ser	Thr	Arg	Arg	Ser	Ile	Met	Pro	
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Pro	Ala	Leu	Glu	Ala	Leu	Ser	Cys	Gly	Glu	Ser	Ser	Tyr	Asp	Asp	Tyr	
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Cys	Asp	Gly	Phe	Lys	Asp	Leu	Ile	Lys	Pro	His	Glu	Glu	Leu	Lys	Lys	
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Ser	Gly	Arg	Gly	Lys	Lys	Pro	Thr	Arg	Thr	Leu	Val	Met	Thr	Ser	Met	
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Gly Cys Trp Val Leu Ser Tyr Asp Trp Val Leu Trp Ser Leu Glu Leu
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Gly His Trp Ile Ser Glu Glu Pro Phe Glu Leu Ser His His Phe Pro
625 630 635 640
Ala Ala Pro Leu Cys Arg Ser Glu Cys His Leu Ser Ala Gly Pro Tyr
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Arg Gly Thr Leu Phe Ala Asp Gln Pro Val Met Phe Val Ser Pro Ala
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Ser Ser Pro Val Ala Lys Leu Cys Glu Leu Val His Leu Cys Gly
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690 695 700
Tyr Ser Gly Lys Lys Lys Ala Thr Val Lys Tyr Leu Ser Glu Lys Trp
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 35 40 45

008249" 6942960

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His	Asn	Ile	Cys	Ser	Val	Cys	Arg	Asp	His	Met	Ala	Gln	His	Phe	Asn
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Gly	Leu	Leu	Glu	Ile	Ala	Arg	Ser	Leu	Asp	Ser	Phe	Leu	Leu	Ser	Pro
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Glu	Ala	Ala	Val	Gly	Leu	Leu	Lys	Gly	Thr	Ala	Leu	Val	Leu	Ala	Arg
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Leu	Pro	Leu	Asp	Lys	Ile	Thr	Glu	Cys	Leu	Ser	Glu	Leu	Cys	Ser	Val
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Gln	Val	Met	Ala	Leu	Lys	Lys	Leu	Leu	Ser	Gln	Glu	Pro	Ser	Asn	Gly
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His	Arg	Ala	Asp	Asn	Arg	Ile	Val	Glu	Arg	Cys	Cys	Arg	Cys	Leu	Arg
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225					230					235					240
Leu	Val	Thr	Gln	Met	Val	Asn	Val	Tyr	His	Val	His	Gln	His	Ser	Cys
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Thr	Phe	Gln	Leu	Leu	Glu	Gln	Gln	Asn	Gly	Leu	Gln	Asn	His	Pro	Asp
	290					295						300			
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Pro	Val	Thr	Leu	Leu	Arg	Ser	Gln	Val	Val	Ile	Pro	Ile	Leu	Gln	Trp
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			340					345					350		
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Cys	Leu	Pro	Pro	Tyr	Thr	Leu	Pro	Asp	Val	Ala	Glu	Val	Leu	Trp	Glu
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Cys Lys Gln Val Cys Trp Ala Leu Arg Asp Phe Thr Arg Leu Phe Arg
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<222> (465).. (773)

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<212> PRT
<213> Homo sapiens

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35 40 45
Gln Cys Pro Leu Gly Ser Ala Arg Asp Pro Gln Leu Gln Thr Gln Gly
50 55 60
Ile Pro Ile Pro Tyr Leu Cys Leu Lys Ser Gly Tyr Cys Cys Phe Val
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Ser Ser Ser Val Thr Gly Met Leu Cys Leu Arg His Pro Thr Leu Val
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Phe Val Phe Gln Thr Cys His
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<211> 2418
<212> DNA
<213> Homo sapiens

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gagagtttct tgatctcttt atctgtggat gaacagctac tttgaaacat atggtagatt 240
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (26).. (529)

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 <211> 168
 <212> PRT
 <213> Homo sapiens

<400> 14851
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 Thr Tyr Ile Pro Phe Tyr Gly Ile Leu Gly Ala Leu Leu Phe Leu Asn

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50 55 60
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65 70 75 80
Ser Ser Gln Leu Thr Ala Thr Cys Asn Val Glu Gln Ser Phe Phe Asn
85 90 95
Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu His His Leu Phe
100 105 110
Pro Thr Met Pro Arg His Asn Leu His Lys Ile Ala Pro Leu Val Lys
115 120 125
Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Glu Lys Pro Leu Leu
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Trp Leu Asp Ala Tyr Leu His Lys
165

<210> 14852
<211> 3046
<212> DNA
<213> Homo sapiens

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<211> 895

<212> PRT

<213> Homo sapiens

<400> 14853

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      20             25             30
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      35             40             45
Gly Met Val Met Phe Asn His Arg Leu Pro Pro Val Thr Ser Leu Thr
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Ser	Gln	Arg	Thr	Ser	Trp	Gly	Phe	Leu	Gln	Ser	Leu	Val	Ser	Ile	Lys
		115					120					125			
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<211> 270

<212> PRT

<213> Homo sapiens

-8695/13211-

<400> 14859

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<211> 2343

<212> DNA

<213> Homo sapiens

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<222> (61).. (2022)

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<212> PRT

<213> Homo sapiens

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-8698/13211-

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Lys	Leu	Leu	Phe	Leu	Arg	Phe	Ala	Met	Glu	Gln	Ser	Phe	Ser	Ala	Asp
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Thr	Gly	Gly	Gly	Gly	Arg	Glu	Ser	Asn	Ile	His	Leu	Ile	Pro	Tyr	Ile
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<211> 734

<212> PRT

<213> Homo sapiens

<400> 14863

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-8700/13211-

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Arg Phe Val Lys Val Gly Glu Ala Ile Ala Asn Glu Asn Trp Asp Leu			
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	225	230	235
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	260	265	270
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Thr Leu Glu Val Ile Leu Glu Arg Met Glu Asp Phe Thr Asp Ser Ala			
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Tyr Thr Ser His Glu His Arg Glu Arg Ile Leu Glu Leu Ser Thr Gln			
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385 390 395 400
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<212> DNA

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<213> Homo sapiens

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<400> 14866

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Gln	Phe	Cys	Cys	Tyr	Phe	Lys	Glu	Leu	Pro	Ala	Val	Glu	Leu	Arg	Asn
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Asn Lys Val Asp Thr Tyr Val Glu Phe Pro Leu Arg Gly Leu Asp Met
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<213> Homo sapiens

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-8710/13211-

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Asp Cys Tyr Leu Arg Asp	Pro Leu Arg Glu Glu Glu	Val Phe Asn Tyr
290	295	300
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Ser Val Trp Gln Lys Ala	Met Asp His Ile Glu Glu	Leu Val Ser Leu
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Lys Pro Cys Lys Ala Ala	Glu Leu Val Ala Thr His	Phe Ser Gly His
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405	410	415
Glu Cys Tyr Arg Leu Glu	Glu Thr Ile Gln Ile Thr	Gln Lys Tyr Gln
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Gly Ala Phe Leu Ile Met	Leu Glu Arg Leu Gln Ser	Lys Leu Gln Glu
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Ile Val Phe Ser Cys Gly His Leu Tyr His Ser Phe Cys Leu Gln Asn		
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Lys Glu Cys Thr Val Glu Phe Glu Gly Gln Thr Arg Trp Thr Cys Tyr		
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Lys Cys Ser Ser Ser Asn Lys Val Gly Lys Leu Ser Glu Asn Ser Ser		
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Glu Ile Lys Lys Gly Arg Ile Thr Pro Ser Gln Val Lys Met Ser Pro		
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Glu Pro Val Leu Asp Pro Gln Gln Ile Gln Ala Phe Asp Gln Leu Cys		
725	730	735
Arg Leu Tyr Arg Gly Ser Ser Arg Leu Ala Leu Leu Thr Glu Leu Ser		
740	745	750
Gln Asn Arg Ser Ser Glu Ser Tyr Arg Pro Phe Ser Gly Ser Gln Ser		
755	760	765
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 Pro Thr Glu Cys Met Met Ser Arg Ser Val Asp His Leu Glu Arg Pro

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Ser	Glu	Ser	Leu	Ser	Ile	Pro	Ala	Ser	Leu	Asn	Asp	Ala	Ala	Leu	Ala		
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<222> (316).. (1800)

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<211> 495

<212> PRT

<213> Homo sapiens

<400> 14883

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 <213> Homo sapiens

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 <222> (248).. (2410)

<400> 14884

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<212> PRT

<213> Homo sapiens

<400> 14885

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Glu Pro Ala Lys Ser Asp Leu Ser Lys Leu Glu Ser Val Arg Met Lys
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Ala Lys Ser Leu Ser Ser Ser Arg Glu Asn Trp Ser Phe Leu Asp
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Trp Asp Ser Arg Phe Ala Asn Phe Arg Asn Asn Lys Asp Lys Glu Lys
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Val Asp Ser Ala Pro Arg Pro Ile Pro Ser Trp Tyr Met Lys Lys Lys
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Thr Ile Lys Asn Glu Glu Thr Ile Glu Pro Asp Lys Thr Tyr Glu Asn
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Glu Ala Ser Ala Pro Gly Ile Ile Ser Ala Leu Ser Lys Gln Asp Ser
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Thr Thr Gln Leu Val Ser Asn Ser Gly Leu Ala Val Ser Gly Glu Glu
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Asn Lys Leu Cys Thr Pro Val Ile Cys Ser Ser Ser Thr Lys Glu Ala
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Glu Asp Ala Pro Glu Lys Leu Ser Arg Ala Ser Asp Met Lys Asp Thr
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<400> 14893

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Phe	Asn	Leu	Asp	Asp	Pro	Tyr	Pro	Leu	Leu	Val	Val	Asn	Ile	Gly	Ser	180	185	190	
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<400> 14905
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 50 55 60
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Ser Phe Asp Glu Phe Thr Lys Glu Pro Phe Ile Val His Gly Arg Arg		910
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<213> Homo sapiens

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<213> Homo sapiens

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		115					120					125			
Thr	Ser	Arg	Glu	Asn	Asn	Thr	His	Pro	Glu	Trp	Ser	Phe	Thr	Thr	Val
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Lys	Glu	Tyr	Asp	Leu	Ile	Val	His	Gln	Leu	Ala	Thr	Tyr	Pro	Asp	Val
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 <213> Homo sapiens

<400> 14923
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<211> 1036

<212> DNA

<213> Homo sapiens

<400> 14924

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Ser Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu
 50 55 60
 Val Asn Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His
 65 70 75 80
 Asp Ile Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val
 85 90 95
 Ser Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Glu Ser Leu Thr
 100 105 110
 Glu Asp Glu Ala Thr Gln Phe Leu Lys Gln Ile Leu Asp Gly Val His
 115 120 125
 Tyr Leu His Ser Lys Arg Ile Ala His Phe Asp Leu Lys Pro Glu Asn
 130 135 140
 Ile Met Leu Leu Asp Lys Asn Val Pro Asn Pro Arg Ile Lys Leu Ile
 145 150 155 160
 Asp Phe Gly Ile Ala His Lys Ile Glu Ala Gly Asn Glu Phe Lys Asn
 165 170 175
 Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr Glu
 180 185 190
 Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr Tyr
 195 200 205
 Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Glu Thr Lys Gln Glu
 210 215 220
 Thr Leu Thr Asn Ile Ser Ala Val Asn Tyr Asp Phe Asp Glu Glu Tyr
 225 230 235 240
 Phe Ser Asn Thr Gly Glu Leu Ala Lys Asp Phe Ile Arg Arg Leu Leu
 245 250 255
 Val Lys Asp Pro Lys Arg Arg Met Thr Ile Ala Gln Ser Leu Glu His
 260 265 270

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Ser Trp Ile Lys Ala Ile Arg Arg Arg Asn Val Arg Gly Glu Asp Ser
275 280 285
Gly Arg Lys Pro Glu Arg Arg Arg Leu Lys Thr Thr Arg Leu Lys Glu
290 295 300
Tyr Thr Ile Lys Ser His Ser Ser Leu Pro Pro Asn Asn Ser Tyr Ala
305 310 315 320
Asp Phe Glu Arg Phe Ser Lys Val Leu Glu Glu Ala Ala Ala Ala Glu
325 330 335
Glu Gly Leu Arg Glu Leu Gln Arg Ser Arg Arg Leu Cys His Glu Asp
340 345 350
Val Glu Ala Leu Ala Ala Ile Tyr Glu Glu Lys Glu Ala Trp Tyr Arg
355 360 365
Glu Glu Ser Asp Ser Leu Gly Gln Asp Leu Arg Arg Leu Arg Gln Glu
370 375 380
Leu Leu Lys Thr Glu Ala Leu Lys Arg Gln Ala Gln Glu Glu Ala Lys
385 390 395 400
Gly Ala Leu Leu Gly Thr Ser Gly Leu Lys Arg Arg Phe Ser Arg Leu
405 410 415
Glu Asn Arg Tyr Glu Ala Leu Ala Lys Gln Val Ala Ser Glu Met Arg
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Phe Val Gln Asp Leu Val Arg Ala Leu Glu Gln Glu Lys Leu Gln Gly
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<212> DNA
<213> Homo sapiens

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<222> (52).. (1923)

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 <211> 624
 <212> PRT
 <213> Homo sapiens

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 Ala Leu Val Pro Glu Ser Leu Gln Glu Gln Ile Gln Ser Asn Phe Ile
 35 40 45
 Ile Val Ile His Pro Gly Ser Thr Thr Leu Arg Ile Gly Arg Ala Thr

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Ile Gly Phe Glu Gly Asp Leu Arg Gly Gln Ser Ser Asp Leu Pro Glu
450 455 460
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465 470 475 480
Leu Met Ala Gly Asn Asp Ser Glu Glu Ala Leu Thr Ala Leu Met Ser
485 490 495
Arg Lys Thr Ala Ile Ser Leu Phe Glu Gly Lys Ala Leu Gly Leu Asp
500 505 510
Lys Ala Ile Leu His Ser Ile Asp Cys Cys Ser Ser Asp Asp Thr Lys
515 520 525
Lys Lys Met Tyr Ser Ser Ile Leu Val Val Gly Gly Gly Leu Met Phe
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His Lys Ala Gln Glu Phe Leu Gln His Arg Ile Leu Asn Lys Met Pro
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Pro Ser Phe Arg Arg Ile Ile Glu Asn Val Asp Val Ile Thr Arg Pro
565 570 575
Lys Asp Met Asp Pro Arg Leu Ile Ala Trp Lys Gly Gly Ala Val Leu
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Ala Cys Leu Gly Thr Thr Gln Glu Leu Trp Ile Tyr Gln Arg Glu Trp
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Gln Arg Phe Gly Val Arg Met Leu Arg Glu Arg Ala Ala Phe Val Trp
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<210> 14929
<211> 2562
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (78).. (803)

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gly Leu Ala Arg Ser Lys Gly Phe Arg Val Leu Asp Ala Cys Ser Ser
 50 55 60
 Glu Ala Thr His Val Val Met Glu Glu Thr Ser Ala Glu Glu Ala Val
 65 70 75 80

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Pro Ala Leu Leu Asp Ile Ser Trp Leu Thr Glu Ser Leu Gly Ala Gly
 100 105 110
Gln Pro Val Pro Val Glu Cys Arg His Arg Leu Glu Val Ala Gly Pro
 115 120 125
Arg Lys Gly Pro Leu Ser Pro Ala Trp Met Pro Ala Tyr Ala Cys Gln
 130 135 140
Arg Pro Thr Pro Leu Thr His His Asn Thr Gly Leu Ser Glu Ala Leu
145 150 155 160
Glu Ile Leu Ala Glu Ala Ala Gly Phe Glu Gly Ser Glu Gly Arg Leu
 165 170 175
Leu Thr Phe Cys Arg Ala Ala Ser Val Leu Lys Ala Leu Pro Ser Pro
 180 185 190
Val Thr Thr Leu Ser Gln Leu Gln Gly Leu Pro His Phe Gly Glu His
 195 200 205
Ser Ser Arg Val Val Gln Glu Leu Leu Glu His Gly Val Cys Glu Glu
 210 215 220
Val Glu Arg Val Arg Arg Ser Glu Ser Ser Ser Pro Arg Ser Ser Gly
225 230 235 240
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<210> 14931
<211> 2264
<212> DNA
<213> Homo sapiens

<220>
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<222> (61).. (1515)

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<400> 14933

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 Lys Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe
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<400> 14938

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 14939

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35 40 45
Cys Val Phe Gly Ser Ala Gly Asn Glu Val Leu Tyr Thr Thr Val Asn
50 55 60
Asp Glu Ile Phe Val Leu Gly Thr Asn Cys Cys Gly Cys Leu Gly Leu
65 70 75 80
Gly Asp Val Gln Ser Thr Ile Glu Pro Arg Arg Leu Asp Ser Leu Asn
85 90 95
Gly Lys Lys Ile Ala Cys Leu Ser Tyr Gly Ser Gly Pro His Ile Val
100 105 110
Leu Ala Thr Thr Glu Gly Glu Val Phe Thr Trp Gly His Asn Ala Tyr
115 120 125
Ser Gln Leu Gly Asn Gly Thr Thr Asn His Gly Leu Val Pro Cys His
130 135 140
Ile Ser Thr Asn Leu Ser Asn Lys Gln Val Ile Glu Val Ala Cys Gly
145 150 155 160
Ser Tyr His Ser Leu Val Leu Thr Ser Asp Gly Glu Val Phe Ala Trp
165 170 175
Gly Tyr Asn Asn Ser Gly Gln Val Gly Ser Gly Ser Thr Val Asn Gln
180 185 190
Pro Ile Pro Arg Arg Val Thr Gly Cys Leu Gln Asn Lys Val Val Val
195 200 205
Thr Ile Ala Cys Gly Gln Met Cys Cys Met Ala Val Val Asp Thr Gly
210 215 220
Glu Val Tyr Val Trp Gly Tyr Asn Gly Asn Gly Gln Leu Gly Leu Gly
225 230 235 240
Asn Ser Gly Asn Gln Pro Thr Pro Cys Arg Val Ala Ala Leu Gln Gly
245 250 255
Ile Arg Val Gln Arg Val Ala Cys Gly Tyr Ala His Thr Leu Val Leu
260 265 270
Thr Asp Glu Gly Gln Val Tyr Ala Trp Gly Ala Asn Ser Tyr Gly Gln
275 280 285

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Leu Gly Thr Gly Asn Lys Ser Asn Gln Ser Tyr Pro Thr Pro Val Thr
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Val Glu Lys Asp Arg Ile Ile Glu Ile Ala Ala Cys His Ser Thr His
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Thr Ser Ala Ala Lys Thr Gln Gly Gly His Val Tyr Met Trp Gly Gln
325 330 335
Cys Arg Gly Gln Ser Val Ile Leu Pro His Leu Thr His Phe Ser Cys
340 345 350
Ala Asp Asp Val Phe Ala Cys Phe Ala Thr Pro Ala Val Thr Trp Arg
355 360 365
Leu Leu Ser Val Glu Pro Asp Asp His Leu Thr Val Ala Glu Ser Leu
370 375 380
Lys Arg Glu Phe Asp Asn Pro Asp Thr Ala Asp Leu Lys Phe Leu Val
385 390 395 400
Asp Gly Lys Tyr Ile Tyr Ala His Lys Val Leu Leu Lys Ile Arg Cys
405 410 415
Glu His Phe Arg Ser Ser Leu Glu Asp Asn Glu Asp Asp Ile Val Glu
420 425 430
Met Ser Glu Phe Ser Tyr Pro Val Tyr Arg Ala Phe Leu Glu Tyr Leu
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450 455 460
Asp Leu Ala Thr Phe Tyr Arg Glu Asn Arg Leu Lys Lys Leu Cys Gln
465 470 475 480
Gln Thr Ile Lys Gln Gly Ile Cys Glu Glu Asn Ala Ile Ala Leu Leu
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Ser Ala Ala Val Lys Tyr Asp Ala Gln Asp Leu Glu Glu Phe Cys Phe
500 505 510
Arg Phe Cys Ile Asn His Leu Thr Val Val Thr Gln Thr Ser Gly Phe
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<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (89).. (1090)

<400> 14940

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 <213> Homo sapiens

<400> 14941

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Tyr Phe Gly Val Val His Gly Pro Ser Ala Gln Leu Leu Ser Ala Ala
          35           40           45
Pro Glu Gly Val Pro Leu Ala Gln Arg Gln Leu His Ala Lys Glu Gly
          50           55           60
Ala Gly Val Ser Pro Pro Leu Ile Thr Gln Val His Trp Cys Val Leu
          65           70           75           80
Pro Phe Arg Val Leu Leu Val Leu Thr Ser His Arg Gly Ile Gln Met
          85           90           95
Tyr Glu Ser Asn Gly Tyr Thr Met Val Tyr Trp His Ala Leu Asp Ser
          100          105          110
Gly Asp Ala Ser Pro Val Gln Ala Val Phe Ala Arg Gly Ile Ala Ala
          115          120          125
Ser Gly His Phe Ile Cys Val Gly Thr Trp Ser Gly Arg Val Leu Val
          130          135          140
Phe Asp Ile Pro Ala Lys Gly Pro Asn Ile Val Leu Ser Glu Glu Leu
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			245					250						255	
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 <213> Homo sapiens

<220>
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 <222> (1027).. (2298)

<400> 14942

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 <212> PRT
 <213> Homo sapiens

<400> 14943

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Ile	Gln	Phe	Val	Gln	Lys	Lys	Pro	Pro	Arg	Glu	Asn	Gly	His	Lys	Gln
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Ile	Phe	Leu	His	Gly	Arg	Asn	Ser	Pro	Gln	Ser	Ser	Pro	Thr	Ser	Thr

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Ile	Glu	Lys	Pro	Met	Ser	Pro	Met	Gln	Tyr	Ala	Arg	Ser	Gly	Leu	Gly		
	130					135					140						
Thr	Ala	Glu	Met	Asn	Gly	Lys	Leu	Ile	Ala	Ala	Gly	Gly	Tyr	Asn	Arg		
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Glu	Glu	Cys	Leu	Arg	Thr	Val	Glu	Cys	Tyr	Asn	Pro	His	Thr	Asp	His		
				165					170					175			
Trp	Ser	Phe	Leu	Ala	Pro	Met	Arg	Thr	Pro	Arg	Ala	Arg	Leu	Gln	Met		
			180					185					190				
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Pro	Asp	Asp	Leu	Ser	Cys	Gly	Glu	Met	Tyr	Asp	Ser	Asn	Ile	Asp	Asp		
	210					215						220					
Trp	Ile	Pro	Val	Pro	Glu	Leu	Arg	Thr	Asn	Arg	Cys	Asn	Ala	Gly	Val		
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Gly	Gln	Lys	Gly	Leu	Lys	Asn	Cys	Asp	Val	Phe	Asp	Pro	Val	Thr	Lys		
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Trp	Asn	Cys	Leu	Asn	Thr	Val	Glu	Arg	Tyr	Asn	Pro	Glu	Asn	Asn	Thr		
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Phe	Leu	Asn	Thr	Val	Glu	Val	Tyr	Asn	Leu	Glu	Ser	Asn	Glu	Trp	Ser		
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<211> 3837

<212> DNA

<213> Homo sapiens

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<222> (150).. (1394)

<400> 14944

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<210> 14949

<211> 538

<212> PRT

<213> Homo sapiens

<400> 14949

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<400> 14951

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Val	Ala	Gly	Ala	Leu	Ile	Ala	Asp	Phe	Leu	Ser	Gly	Leu	Val	His	Trp
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Leu	Pro	Arg	Lys	His	His	Arg	Ile	His	His	Val	Ser	Pro	His	Glu	Thr
	210					215					220				
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Gly	Phe	Trp	Arg	Arg	Leu	Glu	Asp	Leu	Ile	Gln	Gly	Leu	Thr	Gly	Glu
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 <222> (165).. (1157)

<400> 14952

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<400> 14953

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Asn	Ile	Val	Thr	Phe	Ala	Gln	Phe	Leu	Phe	Ile	Ala	Val	Glu	Gly	Phe
		35					40					45			
Leu	Phe	Glu	Ala	Asp	Leu	Gly	Arg	Lys	Pro	Pro	Ala	Ile	Pro	Ile	Arg
	50					55					60				
Tyr	Tyr	Ala	Ile	Met	Val	Thr	Met	Phe	Phe	Thr	Val	Ser	Val	Val	Asn
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				85					90					95	
Arg	Ser	Gly	Ser	Leu	Ile	Ala	Asn	Met	Ile	Leu	Gly	Ile	Ile	Ile	Leu
			100					105					110		
Lys	Lys	Arg	Tyr	Ser	Ile	Phe	Lys	Tyr	Thr	Ser	Ile	Ala	Leu	Val	Ser
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Leu	Leu	Gly	Ile	Gly	Ala	Leu	Thr	Phe	Ala	Leu	Leu	Met	Ser	Ala	Arg
				165					170					175	
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			180					185					190		
Lys	Glu	Ala	Leu	Phe	Tyr	Asn	His	Ala	Leu	Pro	Leu	Pro	Gly	Phe	Val
		195					200					205			
Phe	Leu	Ala	Ser	Asp	Ile	Tyr	Asp	His	Ala	Val	Leu	Phe	Asn	Lys	Ser
	210					215					220				
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225					230					235					240
Phe	Tyr	Leu	Leu	Met	Asn	Ile	Ile	Thr	Gln	Tyr	Val	Cys	Ile	Arg	Gly
				245					250					255	
Val	Phe	Ile	Leu	Thr	Thr	Glu	Cys	Ala	Ser	Leu	Thr	Val	Thr	Leu	Val
			260					265					270		
Val	Thr	Leu	Arg	Lys	Phe	Val	Ser	Leu	Ile	Phe	Ser	Ile	Leu	Tyr	Phe
		275					280					285			
Gln	Asn	Pro	Phe	Thr	Leu	Trp	His	Trp	Leu	Gly	Thr	Leu	Phe	Val	Phe
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Ile	Gly	Thr	Leu	Met	Tyr	Thr	Glu	Val	Trp	Asn	Asn	Leu	Gly	Thr	Thr
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<400> 14955

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			20					25					30		
Val	His	Leu	Val	Arg	Cys	Arg	Ser	Ala	Pro	Lys	Asp	Ser	Ser	Ser	Asp
		35					40					45			
Leu	Gln	Ala	Gln	Pro	Gly	Phe	Ile	His	Asn	Ser	Glu	Leu	Leu	Leu	Val
	50					55					60				
Ser	Gly	Glu	Val	Met	His	Asp	Ser	Ser	Phe	Ser	Val	Lys	Arg	Lys	Leu
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Pro	Asp	Gly	His	Leu	Gly	Ala	Glu	Asp	Gln	Arg	His	Gly	Glu	Glu	Gln
				85					90					95	
Pro	Pro	Ile	Leu	Asn	Ala	Asp	Ala	Ala	Pro	Gly	Pro	Glu	Lys	Val	Thr
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Pro	Ile	Val	Lys	Asp	Glu	Ala	Leu	Gln	Ile	Leu	Ala	Leu	Asp	Pro	Lys
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				165					170					175	
Ser	Ser	Leu	Phe	Trp	Val	Trp	Lys	Ile	Asp	Val	Ala	Ser	Phe	Phe	Gly
			180				185						190		
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Lys	Tyr	Lys	Cys	Asp	Ile	Cys	Gly	Lys	Val	Phe	Asn	Gln	Lys	Arg	Tyr
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35 40 45
Ser Thr Arg Thr Ala Tyr Ala Thr Gln Leu Ala Leu Arg Met Gln Leu
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<212> PRT

<213> Homo sapiens

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His Leu Pro Arg Pro Pro Arg Val Leu Gly Leu Gln Ala Gly Gly Thr
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Ala Pro Gly Gln Lys Lys Leu Phe Leu Thr Ser His Phe Pro Pro Ala
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Ser Pro Leu Pro Leu Cys Phe Ser Leu Gln Gln Asn Phe Lys Lys His
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<400> 14975

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				165					170					175	
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Glu Val Thr Arg Leu Arg Glu Leu Thr Arg Thr Leu Gln Thr Ser Met				
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Ala Lys Leu Leu Ser Asp Leu Ser Val Asp Ser Ala Arg Cys Lys Pro				
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Gly Asn Asn Leu Thr Lys Ser Leu Leu Asn Ile His Asp Lys Gln Leu				
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Gln His Asp Pro Ala Pro Ala His Thr Ser Ile Met Ser Tyr Leu Asn				
	325		330	335
Lys Leu Glu Thr Asn Tyr Ser Phe Thr His Ser Glu Pro Leu Ser Thr				
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Ile Lys Asn Glu Glu Thr Ile Glu Pro Asp Lys Thr Tyr Glu Asn Val				
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Leu Ser Ser Arg Gly Pro Gln Asn Ser Asn Thr Arg Gly Met Glu Glu				
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Ala Ser Ala Pro Gly Ile Ile Ser Ala Leu Ser Lys Gln Asp Ser Asp				
385		390		395
Glu Gly Ser Glu Thr Met Ala Leu Ile Glu Asp Glu His Asn Leu Asp				
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Asn Thr Ile Tyr Ile Pro Phe Ala Arg Ser Thr Pro Glu Lys Lys Ser				
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Pro Leu Ser Lys Arg Leu Ser Pro Gln Pro Gln Ile Arg Ala Ala Thr				
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Thr Gln Leu Val Ser Asn Ser Gly Leu Ala Val Ser Gly Lys Glu Asn				
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	485		490	495
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Phe Thr Ser Arg Asp Glu Gln Asp Phe Arg Asn Gly Leu Ala Ala Leu				
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-8851/13211-

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 Gly Gly Tyr Asp Gly His Thr Tyr Leu Asn Thr Val Glu Ser Tyr Asp
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<212> DNA

<213> Homo sapiens

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Lys	His	Met	Arg	Tyr	Arg	Ile	Lys	Asp	Asp	Leu	Thr	Thr	Ile	Arg	His
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210 215 220
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225 230 235 240
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260 265 270
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<212> PRT

<213> Homo sapiens

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Lys	Leu	Lys	Gly	Phe	Phe	Gln	Ser	Ala	Lys	Ala	Ser	Lys	Ile	Glu	Thr
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Lys	Thr	Leu	Pro	Gly	Ile	Thr	Pro	Cys	Glu	Ser	Ser	Val	Cys	Gly	Glu
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Glu	Glu	Asn	Ser	Tyr	Asn	Ser	Gln	Glu	Cys	Gly	Asn	Gly	Phe	Ser	Leu
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Gln	Gly	His	Pro	Lys	Ile	His	Ile	Gly	Glu	Lys	Pro	Arg	Lys	Glu	His
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Ser	Trp	Ser	Phe	Asn	Leu	Gln	Ile	His	Gln	Arg	Val	His	Thr	Gly	Glu
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Thr	Leu	Leu	Ala	His	Gln	Arg	Val	His	Thr	Gly	Glu	Lys	Pro	Tyr	Gln
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Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Gln	Arg	Ser	Tyr	Leu	Gln	Ser
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Cys	Glu	Gln	Cys	Gly	Lys	Gly	Phe	Ser	Gly	Tyr	Ser	Ser	Leu	Gln	Ala
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		35					40					45			
Glu	Lys	Leu	Phe	Val	Lys	Leu	Ala	Thr	Ser	Lys	Thr	Ala	Val	Glu	Asp
	50					55					60				
Ser	Asp	Lys	Ala	Tyr	Met	Leu	His	Ile	Gly	Thr	Leu	Asp	Lys	Val	Arg
	65				70					75				80	
Glu	Glu	Trp	Gln	Ser	Glu	His	Ile	Lys	Ala	Cys	Glu	Ala	Phe	Glu	Ala
			85						90				95		
Gln	Glu	Cys	Glu	Arg	Ile	Asn	Phe	Phe	Arg	Asn	Ala	Leu	Trp	Leu	His
			100					105					110		
Val	Asn	Gln	Leu	Ser	Gln	Gln	Cys	Val	Thr	Ser	Asp	Glu	Met	Tyr	Glu
	115						120				125				
Gln	Val	Arg	Lys	Ser	Leu	Glu	Met	Cys	Ser	Ile	Gln	Arg	Asp	Ile	Glu
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Tyr	Phe	Val	Asn	Gln	Arg	Lys	Thr	Gly	Gln	Ile	Pro	Pro	Ala	Pro	Ile
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Leu Leu Tyr Gln
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			20					25					30		
Gln	Val	Glu	Leu	Pro	Pro	Tyr	Leu	Glu	Arg	Val	Lys	Gln	Gln	Ala	Asn
		35					40					45			
Glu	Ala	Phe	Ala	Cys	Gln	Gln	Trp	Thr	Gln	Ala	Ile	Gln	Leu	Tyr	Ser
	50					55				60					
Lys	Ala	Val	Gln	Arg	Ala	Pro	His	Asn	Ala	Met	Leu	Tyr	Gly	Asn	Arg
	65				70				75					80	
Ala	Ala	Ala	Tyr	Met	Lys	Arg	Lys	Trp	Asp	Gly	Asp	His	Tyr	Asp	Ala
			85					90						95	
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225 230 235 240
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<212> PRT

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Lys Ala Ile Val Thr Gly Lys Asp Cys Pro His Met Lys Glu Lys Ser
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Ala Leu Lys Gln Asn Lys Glu Val Leu Glu Leu Ala Phe Ser Ile Leu
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Glu	Ala	Pro	Ala	Ala	Pro	Arg	Pro	Thr	Ala	Thr	Gln	Leu	Thr	Arg	Asp	165	170	175	
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<213> Homo sapiens

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 35 40 45
 Ile Leu Pro Leu Gln Glu Ala Asn Ala Glu Leu Ser Glu Lys Ser Gly

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<400> 15059

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Asp Thr Lys Gly Leu Glu Asp Ser Val Ala Lys Thr Phe Glu Lys Cys
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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 15065

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165 170 175
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Tyr Gly Leu Pro Thr Val Pro Phe Glu Met Val Val Glu Ala Ala Gln		
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195 200 205
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009240"69462960

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<222> (194).. (1738)

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115 120 125
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<400> 15089

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 Glu Gln Glu Glu Thr Val Ile Ser Tyr Glu Ser Thr Pro Glu Val Ser
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 Arg Gly Asn Gln Thr Met Ala Val Lys Ser Leu Ser Pro Ser Pro Glu
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<212> PRT

<213> Homo sapiens

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<212> DNA
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			180					185					190		
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<211> 943

<212> PRT

<213> Homo sapiens

<400> 15106

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35 40 45
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09629469 072800

-9007/13211-

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<400> 15107

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<212> PRT

<213> Homo sapiens

09629469.072300

<400> 15108

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Ile	Gln	Val	Gln	His	Gln	Arg	Asn	Gln	Asn	Lys	Ile	Lys	Glu	Leu	Thr
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Gln Asp Leu Ala Leu Leu Cys Glu Val Arg Asp Ser Asn Arg Arg Ala				
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 <222> (357).. (761)

<400> 15109

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<212> PRT

<213> Homo sapiens

<400> 15112

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Ser	Val	Ala	Leu	Arg	Arg	Leu	Gly	Gln	Leu	Leu	Gly	Ser	Arg	Pro	Arg
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Pro	Pro	Pro	Val	Glu	Gln	Val	Thr	Leu	Gln	Asp	Leu	Ser	Gln	Leu	Ile
			100					105					110		
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<211> 2496

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (331).. (2352)

<400> 15113

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009220.69462960

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 <211> 674
 <212> PRT
 <213> Homo sapiens

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-9015/13211-

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Glu Ile Ser Gln Val Cys Ala Thr Lys Leu Phe Lys Lys Tyr Ala Glu
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Lys Tyr Ser Ala Ile Ile Asp Ser Asp Asn Val Glu Ser Gly Leu Asn
65 70 75 80
Asn Tyr Ala Glu Asn Ile Leu Thr Leu Ala Gly Ser Gln Gln Thr Asp
85 90 95
Ser Asp Lys Trp Gln Ser Gly Leu Ser Ile Asn Asn Val Phe Lys Met
100 105 110
Ser Ser Val Gln Lys Met Met Gln Ala Gly Lys Lys Phe Lys Asp Ser
115 120 125
Leu Leu Glu Pro Ala Leu Ala Ser Val Val Ile His Lys Glu Ala Thr
130 135 140
Val Phe Asp Leu Pro Lys Phe Ser Val Cys Gly Ser Ser Gln Glu Ser
145 150 155 160
Asp Ser Leu Pro Asn Ser Ala His Asp Arg Asp Arg Thr Gln Asp Phe
165 170 175
Pro Glu Ser Asn Arg Leu Lys Leu Leu Gln Asn Ala Gln Pro Pro Met
180 185 190
Val Thr Asn Thr Ala Arg Thr Cys Pro Thr Phe Ser Ala Pro Val Gly
195 200 205
Glu Ser Ala Thr Ala Lys Phe His Val Thr Pro Leu Phe Gly Asn Val
210 215 220
Lys Lys Glu Asn His Ser Ser Ala Lys Glu Asn Ile Gly Leu Asn Val
225 230 235 240
Phe Leu Ser Asn Gln Ser Cys Phe Pro Ala Ala Cys Glu Asn Pro Gln
245 250 255
Arg Lys Ser Phe Tyr Gly Ser Gly Thr Ile Asp Ala Leu Ser Asn Pro
260 265 270
Ile Leu Asn Lys Ala Cys Ser Lys Thr Glu Asp Asn Gly Pro Lys Glu
275 280 285
Asp Ser Ser Leu Pro Thr Phe Lys Thr Ala Lys Glu Gln Leu Trp Val
290 295 300
Asp Gln Gln Lys Lys Tyr His Gln Pro Gln Arg Ala Ser Gly Ser Ser
305 310 315 320
Tyr Gly Gly Val Lys Lys Ser Leu Gly Ala Ser Arg Ser Arg Gly Ile
325 330 335
Leu Gly Lys Phe Val Pro Pro Ile Pro Lys Gln Asp Gly Gly Glu Gln
340 345 350
Asn Gly Gly Met Gln Cys Lys Pro Tyr Gly Ala Gly Pro Thr Glu Pro
355 360 365
Ala His Pro Val Asp Glu Arg Leu Lys Asn Leu Glu Pro Lys Met Ile
370 375 380
Glu Leu Ile Met Asn Glu Ile Met Asp His Gly Pro Pro Val Asn Trp
385 390 395 400
Glu Asp Ile Ala Gly Val Glu Phe Ala Lys Ala Thr Ile Lys Glu Ile
405 410 415
Val Val Trp Pro Met Leu Arg Pro Asp Ile Phe Thr Gly Leu Arg Gly

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-9016/13211-

420 425 430
Pro Pro Lys Gly Ile Leu Leu Phe Gly Pro Pro Gly Thr Gly Lys Thr
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Leu Ile Gly Lys Cys Ile Ala Ser Gln Ser Gly Ala Thr Phe Phe Ser
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Ile Ser Ala Ser Ser Leu Thr Ser Lys Trp Val Gly Glu Gly Glu Lys
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Met Val Arg Ala Leu Phe Ala Val Ala Arg Cys Gln Gln Pro Ala Val
485 490 495
Ile Phe Ile Asp Glu Ile Asp Ser Leu Leu Ser Gln Arg Gly Asp Gly
500 505 510
Glu His Glu Ser Ser Arg Arg Ile Lys Thr Glu Phe Leu Val Gln Leu
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Asp Gly Ala Thr Thr Ser Ser Glu Asp Arg Ile Leu Val Val Gly Ala
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Thr Asn Arg Pro Gln Glu Ile Asp Glu Ala Ala Arg Arg Arg Leu Val
545 550 555 560
Lys Arg Leu Tyr Ile Pro Leu Pro Glu Ala Ser Ala Arg Lys Gln Ile
565 570 575
Val Ile Asn Leu Met Ser Lys Glu Gln Cys Cys Leu Ser Glu Glu Glu
580 585 590
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595 600 605
Thr Gln Leu Cys Arg Gly Ala Ser Leu Gly Pro Ile Arg Ser Leu Gln
610 615 620
Thr Ala Asp Ile Ala Thr Ile Thr Pro Asp Gln Val Arg Pro Ile Ala
625 630 635 640
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<212> DNA
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<220>
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<222> (100).. (861)

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09629469.072800

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<210> 15116
 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 15116

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Ser Tyr Leu Glu Leu Val Thr Ser Asn His His Ser Val Gln Ala Leu
35 40 45
Ser Trp Arg Lys Leu Tyr Leu Ser Arg Ala Lys Leu Lys Ala Ser Ser
50 55 60
Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala Met Val Ala Met Val Glu
65 70 75 80
Val Gln Leu Glu Thr Gln Tyr Gln Tyr Pro Arg Pro Leu Leu Ile Ala
85 90 95
Phe Ser Ala Cys Thr Thr Val Leu Val Ala Val His Leu Phe Ala Leu
100 105 110
Leu Ile Ser Thr Cys Ile Leu Pro Asn Val Glu Ala Val Ser Asn Ile
115 120 125
His Asn Leu Asn Ser Ile Ser Glu Ser Pro His Glu Arg Met His Pro
130 135 140
Tyr Ile Glu Leu Ala Trp Gly Phe Ser Thr Val Leu Gly Ile Leu Leu
145 150 155 160
Phe Leu Ala Glu Val Val Leu Leu Cys Trp Ile Lys Phe Leu Pro Val
165 170 175
Asp Ala Arg Arg Gln Pro Gly Pro Pro Pro Gly Pro Gly Ser His Thr
180 185 190
Gly Trp Gln Ala Ala Leu Val Ser Thr Ile Ile Met Val Pro Val Gly
195 200 205
Leu Ile Phe Val Val Phe Thr Ile His Phe Tyr Arg Ser Leu Val Arg
210 215 220
His Lys Thr Glu Arg His Asn Arg Glu Ile Glu Glu Leu His Lys Leu
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<210> 15117

<211> 3384

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

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-9020/13211-

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<211> 339

<212> PRT

<213> Homo sapiens

<400> 15118

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35 40 45
Thr Ser Ala Val Ser Thr Pro Ser Pro Ser Ala Asp Leu Leu Gly Leu
50 55 60
Gly Ala Ala Pro Pro Ala Pro Ala Gly Pro Pro Pro Ser Ser Gly Gly
65 70 75 80
Ser Gly Leu Leu Val Asp Val Phe Ser Asp Ser Ala Ser Val Val Ala
85 90 95
Pro Leu Ala Pro Gly Ser Glu Asp Asn Phe Ala Arg Phe Val Cys Lys
100 105 110
Asn Asn Gly Val Leu Phe Glu Asn Gln Leu Leu Gln Ile Gly Leu Lys
115 120 125
Ser Glu Phe Arg Gln Asn Leu Gly Arg Met Phe Ile Phe Tyr Gly Asn
130 135 140
Lys Thr Ser Thr Gln Phe Leu Asn Phe Thr Pro Thr Leu Ile Cys Ser
145 150 155 160
Asp Asp Leu Gln Pro Asn Leu Asn Leu Gln Thr Lys Pro Val Asp Pro
165 170 175
Thr Val Glu Gly Gly Ala Gln Val Gln Gln Val Val Asn Ile Glu Cys
180 185 190
Val Ser Asp Phe Thr Glu Ala Pro Val Leu Asn Ile Gln Phe Arg Tyr
195 200 205
Gly Gly Thr Phe Gln Asn Val Ser Val Gln Leu Pro Ile Thr Leu Asn
210 215 220
Lys Phe Phe Gln Pro Thr Glu Met Ala Ser Gln Asp Phe Phe Gln Arg
225 230 235 240
Trp Lys Gln Leu Ser Asn Pro Gln Gln Glu Val Gln Asn Ile Phe Lys
245 250 255
Ala Lys His Pro Met Asp Thr Glu Val Thr Lys Ala Lys Ile Ile Gly
260 265 270
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<400> 15121

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 <213> Homo sapiens

<400> 15122

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Val	Arg	Asn	Leu	Ala	Val	Leu	Cys	Leu	Gly	Cys	Cys	Gly	Leu	Gln	Asn
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Glu	Asp	Val	Gln	Leu	Arg	His	Cys	Leu	Gly	Val	Phe	Phe	Pro	Val	Phe
Ala	Tyr	Ala	Ser	Arg	Thr	Asn	Gln	Glu	Cys	Phe	Glu	Glu	Ala	Phe	Leu
Pro	Thr	Leu	Gln	Thr	Leu	Ala	Asn	Ala	Pro	Ala	Ser	Ser	Pro	Leu	Ala
Glu	Ile	Asp	Ile	Thr	Asn	Val	Ala	Glu	Leu	Leu	Val	Asp	Leu	Thr	Arg
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Thr	Ser	Pro	Cys	Ser	Pro	Glu	Ile	Arg	Val	Tyr	Thr	Lys	Ala	Leu	Ser
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Gln Ala Glu Ala Ala Gln Asp Ala Thr Leu Thr Thr Thr Thr Phe Gln
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Gly Gln Arg Lys Val Thr Val Ser Ala Arg Thr Asn Arg Arg Cys Gln
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 65 70 75 80
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 Arg Gly Lys Leu Gly Glu Lys Leu Thr Ser Glu Ile Gln Ser Arg Glu

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740 745 750
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<400> 15129

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<222> (14).. (1135)

<400> 15130

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Glu Glu Leu His Asn Arg Phe Gln Ser Leu Cys Gln Ala Pro Pro Pro
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325 330 335
Gly Asp Phe Glu Val Pro Gly Leu Ser Ile Trp Thr Asp Leu Leu Leu
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<222> (496).. (2007)

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His Ser Lys Glu Val Ser Glu Ala Glu Pro Gly Gly Gly Ser Ser Gly
          50             55             60
Asp Ser Gly Pro Pro Glu Glu Ser Gly Gln Glu Met Met Glu Glu Lys
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Glu Glu Ile Arg Lys Ser Lys Ser Val Ile Val Pro Ser Gly Ala Pro
          85             90             95
Lys Lys Glu His Val Asn Val Val Phe Ile Gly His Val Asp Ala Gly
          100            105            110
Lys Ser Thr Ile Gly Gly Gln Ile Met Phe Leu Thr Gly Met Val Asp
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Ile Ser Ala Arg Lys Gly Glu Phe Glu Thr Gly Phe Glu Lys Gly Gly
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Arg Asn Pro Ser Ile Tyr Glu Lys Leu Ile Gln Phe Cys Ala Ile Asp
50 55 60
Glu Leu Gly Thr Asn Tyr Pro Lys Asp Met Phe Asp Pro His Gly Trp
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Lys Glu Val Ala Thr Val Thr Lys Leu Cys Ala Glu Asp Val Lys Asp
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Phe Leu Glu His Met Ala Val Val Arg Ile Asn Lys Gly Trp Glu Phe
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Ile Leu Pro Tyr Asp Gly Glu Phe Ile Lys Lys His Pro Asp Val Val
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Val Tyr Asn Leu Val Lys Glu Thr Met Pro Lys Lys Pro Asp Ala Gln
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Ser Gly Pro Ala Gly Leu Val Cys Gly Asp Gln Arg Ile Gln Val Ala
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Glu Ala Glu Glu Glu Pro Met Asp Thr Ser Pro Ser Gly Leu His Ser
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355	360	365
Cys Phe Thr Leu Ile Ile	Gln Ser Leu Gln Arg	Gly Asp Ile Gln Pro
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Gln Lys Leu His His Ile	Leu Glu Ile Leu Val	Ser Cys Met Pro Phe
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<222> (54).. (1475)

<400> 15157

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Arg Val Ile Trp Leu Ile Gly Gln Trp Ile Ser Val Lys Phe Lys Ser
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Gln Asp Leu Val Val Arg Ile Glu Thr Ala Thr Thr Leu Lys Leu Thr
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Val Asp Asp Phe Glu Phe Arg Thr Asp Gln Phe Leu Pro Tyr Leu Glu
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Asp Thr Lys Met His Val Leu His Val Leu Ser Cys Val Ile Glu Arg
145 150 155 160
Val Asn Met Gln Ile Arg Pro Tyr Val Gly Cys Leu Val Gln Tyr Leu
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Met Trp Val Asp Arg Met Asp Asn	Ile Thr Gln Pro Glu Arg Arg Lys	
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<212> PRT

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Cys Gln Lys Leu Pro Ser Pro Leu Asp Ile Thr Ala Glu Arg Val Glu
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<213> Homo sapiens

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003220" 69462960

<400> 15170

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His	Val	Thr	Val	Glu	Asn	Val	Gln	Glu	Leu	Leu	Pro	Ala	Ala	Cys	Leu
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008220" 69462360

09529459-072800

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 <213> Homo sapiens

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Ala Lys Asp Leu Gly Leu Gly Val Gly Glu Leu Ala Thr Arg Gly Ala			
	50	55	60
Arg Met His Tyr Lys Gly Asn Lys Glu Leu Leu Gln Leu Asp Ile Lys			
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Thr Gly Asn Leu Leu Leu Tyr Glu Lys Leu Asp Arg Glu Val Met Cys			
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Gly Ala Thr Glu Pro Cys Ile Leu His Phe Gln Leu Leu Leu Glu Asn			
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Pro Val Gln Phe Phe Gln Thr Asp Leu Gln Leu Thr Asp Ile Asn Asp			
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Ser Thr Gln Pro Gly Thr Val Phe Pro Leu Lys Ile Ala Gln Asp Phe			
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His Phe His Val Ala Thr His Asn Arg Gly Asp Gly Arg Lys Tyr Pro			
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	195	200	205
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Glu Phe Leu Gln Ser Phe Tyr Glu Val Gln Val Pro Glu Asn Ser Pro			
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Leu Asn Ser Leu Val Val Val Val Ser Ala Arg Asp Leu Asp Ala Gly			
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Ala Tyr Gly Ser Val Ala Tyr Ala Leu Phe Gln Gly Asp Glu Val Thr			
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Gln Pro Phe Val Ile Asp Glu Lys Thr Ala Glu Ile Arg Leu Lys Arg			
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Ser Pro Thr Pro Glu Asn Ala Pro Glu Thr Val Val Ala Val Phe Ser			
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Val Ser Asp Pro Asp Ser Gly Asp Asn Gly Arg Met Ile Cys Ser Ile			
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Gln Asn Asp Leu Pro Phe Leu Leu Lys Pro Thr Leu Lys Asn Phe Tyr			

008270" 69463960

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Ala	Phe	Thr	Gln	Thr	Ser	Tyr	Thr	Leu	Phe	Val	Arg	Glu	Asn	Asn	Ser
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Thr	Asn	Ala	Gln	Val	Thr	Tyr	Ser	Leu	Leu	Pro	Pro	Glu	Pro	Thr	Pro
			485						490					495	
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		500						505					510		
Cys	Pro	Gln	Val	Ala	Gly	Leu	Arg	Gly	Pro	Ala	Gly	Val	Arg	Val	Pro
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Arg	Gly	Ser	His	Arg	Pro	Arg	Leu	Pro	Gly	Ala	Glu	Gln	Arg	Gly	Ala
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Gly	Ala	Arg	Ala	Gly	Ala	Gly	Arg	Gln	Arg	Gln	Leu	Ala	Leu	Arg	Ala
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Val	Ser	Ala	Ala	Glu	Arg	Leu	Gly	Ala	Leu	His	Arg	Ala	Gly	Ala	Pro
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 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 15174

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Val Cys Lys Gln Lys Ala Leu Glu Leu Leu Pro Lys Val Glu Glu Val
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Lys Arg Gln Lys Glu Leu Trp Asn Leu Leu Lys Ile Ala Cys Ser Lys
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 <212> PRT
 <213> Homo sapiens

<400> 15176

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			20					25					30		
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008220" 69162260

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Glu	Gly	Leu	Arg	Val	Val	Arg	Gln	Trp	Leu	Glu	Ala	Ser	Ser	Gln	Leu
465					470					475					480
Glu	Glu	Ala	Ser	Ile	Tyr	Ser	Arg	Trp	Glu	Val	Glu	Glu	Asp	Trp	Cys
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Trp	Ser	Val	Gly	Glu	Asp	Met	Ser	Ala	Asp	Gly	Arg	Arg	Gln	Leu	Ala
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Leu	Phe	Leu	Ala	Arg	Lys	His	Leu	His	Asn	Phe	Glu	Ala	Thr	His	Cys

008220" 69462960

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0096240"59462960

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			20					25					30		
Ile	Cys	Ile	Thr	Val	Phe	Leu	Ser	Tyr	Leu	Pro	Glu	Ala	Gly	Gln	Tyr
		35					40					45			
Ser	Ser	Phe	Phe	Leu	Tyr	Leu	Arg	Gln	Val	Ile	Gly	Phe	Gly	Ser	Val
	50					55					60				
Lys	Ile	Ala	Ala	Phe	Ile	Ala	Met	Val	Gly	Ile	Leu	Ser	Ile	Val	Ala
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Gln	Thr	Ala	Phe	Leu	Ser	Ile	Leu	Met	Arg	Ser	Leu	Gly	Asn	Lys	Asn
				85					90					95	
Thr	Val	Leu	Leu	Gly	Leu	Gly	Phe	Gln	Met	Leu	Gln	Leu	Ala	Trp	Tyr
			100					105					110		
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		115					120					125			
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Ile	Arg	Gly	Leu	Cys	Asn	Gly	Leu	Gly	Pro	Ala	Leu	Tyr	Gly	Phe	Ile
				165					170					175	
Phe	Tyr	Met	Phe	His	Val	Glu	Leu	Thr	Glu	Leu	Gly	Pro	Lys	Leu	Asn
			180					185					190		
Ser	Asn	Asn	Val	Pro	Leu	Gln	Gly	Ala	Val	Ile	Pro	Gly	Pro	Pro	Phe
		195					200					205			
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008270" 69462960

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000220" 69462960


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 <213> Homo sapiens

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Trp	Thr	Val	Thr	Gly	Lys	Lys	Lys	Asn	Lys	Lys	Lys	Lys	Asn	Lys	Pro
			85					90					95		
Lys	Pro	Ala	Ala	Glu	Pro	Ser	Asn	Gly	Ile	Pro	Asp	Ser	Ser	Lys	Ser
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008220" 69462960

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Thr	Arg	Val	Ser	Met	Glu	Pro	Ser	Pro	Pro	Thr	Pro	Ser	Phe	Lys Lys
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<400> 15181

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Gly Asn Ala Ser Tyr Phe Cys Thr Leu Ile Leu Tyr Pro Glu Ile Leu
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 Phe Glu Arg Trp Met Glu Trp Gln Pro Glu Glu Gln Ala Trp His Ser
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<400> 15208

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Phe	His	Cys	Asp	Ser	Gly	Tyr	Gln	Leu	Gln	Gly	Glu	Glu	Thr	Leu	Ile
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Arg Arg Arg Leu Leu Ser Ser Gly Pro Asp Leu Thr Leu Gln Phe Gln						
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His Phe Lys Glu Val Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Pro						
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Pro Glu Trp Gly Trp Arg Thr Ala Ser His Gly Asp Leu Ile Arg Gly						
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Thr Val Leu Thr Tyr Gln Cys Glu Pro Gly Tyr Glu Leu Leu Gly Ser						
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Asp Ile Leu Thr Cys Gln Trp Asp Leu Ser Trp Ser Ala Ala Pro Pro						
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Gln Tyr Arg Cys Leu Pro Gly Tyr Ser Leu Glu Gly Ala Ala Met Leu						
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Thr Cys Tyr Ser Arg Asp Thr Gly Thr Pro Lys Trp Ser Asp Arg Val						
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Pro Leu Cys Lys Val Ala Tyr Glu Glu Leu Leu Asp Asn Arg Lys Leu		575
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Glu Val Thr Gln Thr Thr Asp Pro Ser Arg Gln Leu Glu Gly Gly Asn		590
	595	600
Leu Ala Leu Ala Ile Leu Leu Pro Leu Gly Leu Val Ile Val Leu Gly		605
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Ser Gly Val Tyr Ile Tyr Tyr Thr Lys Leu Gln Gly Lys Ser Leu Phe		620
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Gly Phe Ser Gly Ser His Ser Tyr Ser Pro Ile Thr Val Glu Ser Asp		640
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 <213> Homo sapiens

<400> 15210

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Thr	Glu	Pro	Leu	Glu	Ile	Asn	Leu	Glu	Pro	Pro	Gly	Pro	Leu	Thr	Leu
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Phe	Lys	Gly	Tyr	Gln	Arg	Gln	Asp	Ser	Gln	Glu	Leu	Leu	Arg	Tyr	Leu
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	130					135					140				

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Glu	Met	Ser	Leu	Gln	Gly	Glu	Val	Asn	Ile	Lys	Ser	Asn	His	Ile	Ser
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Arg	Gln	Cys	Asn	Gly	Pro	Lys	Ala	Asn	Ile	Lys	Gly	Glu	Arg	Lys	His
				485					490					495	
Val	Tyr	Thr	Asn	Ala	Lys	Lys	Gln	Met	Leu	Ile	Ser	Leu	Ala	Pro	Pro
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			20					25					30		
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			35				40					45			
Lys	Pro	Lys	Ala	Arg	Gln	Phe	Phe	Leu	Phe	Asn	Asp	Ile	Leu	Val	Tyr
		50				55				60					
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Pro	Leu	Glu	Asn	Val	Thr	Ile	Asp	Ser	Ile	Lys	Asp	Glu	Gly	Asp	Leu
			85					90					95		
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180 185 190
Leu Pro Ser Gln Ser Ser Lys Pro Val Arg Ile Cys Asp Phe Cys Tyr
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Phe	Ser	Thr	Asp	Glu	Pro	Lys	Thr	Glu	Thr	Glu	Ser	Asn	Val	Asn	Ala
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			20					25					30		
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	50					55				60					
Lys	Glu	Ser	Glu	Gly	Glu	Glu	Glu	Asp	Glu	Asp	Glu	Asp	Leu	Ser	Lys
65				70					75					80	
Tyr	Lys	Leu	Asp	Glu	Asp	Glu	Asp	Glu	Asp	Ala	Asp	Leu	Ser	Lys	
			85				90					95			
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 Glu Arg Ser Arg Ser Arg Gly Ser Lys Ser Arg Ser Ser Ser Arg Ser
 165 170 175
 His Arg Gly Ser Ser Ser Pro Arg Lys Arg Ser Tyr Ser Ser Ser Ser
 180 185 190
 Ser Ser Pro Glu Arg Asn Arg Lys Arg Ser Arg Ser Arg Ser Ser Ser
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 <213> Homo sapiens

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			20					25					30		
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			35				40					45			
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210 215 220
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225 230 235 240
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245 250 255
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260 265 270
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<212> PRT

<213> Homo sapiens

<400> 15221

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35 40 45
Ala Tyr Phe Asn Asp Ile Ala Val Gly Ala Val Cys Cys Arg Val Asp
50 55 60
His Ser Gln Asn Gln Lys Arg Leu Tyr Ile Met Thr Leu Gly Cys Leu
65 70 75 80
Ala Pro Tyr Arg Arg Leu Gly Ile Gly Thr Lys Met Leu Asn His Val
85 90 95
Leu Asn Ile Cys Glu Lys Asp Gly Thr Phe Asp Asn Ile Tyr Leu His
100 105 110
Val Gln Ile Ser Asn Glu Ser Ala Ile Asp Phe Tyr Arg Lys Phe Gly
115 120 125
Phe Glu Ile Ile Glu Thr Lys Lys Asn Tyr Tyr Lys Arg Ile Glu Pro
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 <212> PRT
 <213> Homo sapiens

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Gly Phe Ser Asp Ser Gln Val Cys Ala Phe Cys His Thr Ser Thr Leu
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Ala Ala Met Lys Leu Met Thr Ser Leu Val Arg Val Ala Leu Gln Leu
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Ser Leu His Gln Asp Ile Asn Gln Arg Gln Tyr Glu Ala Glu Arg Asn
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<212> DNA
<213> Homo sapiens

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<222> (386).. (2287)

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<211> 634

<212> PRT

<213> Homo sapiens

<400> 15225

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Glu His Trp Pro Lys Gly Asp Ile His Glu Asp Phe Cys Ser Val Cys
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Arg Lys Ser Gly Gln Leu Leu Met Cys Asp Thr Cys Ser Arg Val Tyr
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His Leu Asp Cys Leu Asp Pro Pro Leu Lys Thr Ile Pro Lys Gly Met
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Trp Ile Cys Pro Arg Cys Gln Asp Gln Met Leu Lys Lys Glu Glu Ala
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Ile Pro Trp Pro Gly Thr Leu Ala Ile Val His Ser Tyr Ile Ala Tyr
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Lys Ala Ala Lys Glu Glu Glu Lys Gln Lys Leu Leu Lys Trp Ser Ser
515 520 525
Asp Leu Lys Gln Glu Arg Glu Gln Leu Glu Gln Lys Val Lys Gln Leu
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Ser Asn Ser Ile Ser Lys Cys Met Glu Met Lys Asn Thr Ile Leu Ala
545 550 555 560
Arg Gln Lys Glu Met His Ser Ser Leu Glu Lys Val Lys Gln Leu Ile
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Arg Leu Ile His Gly Ile Asp Leu Ser Lys Pro Val Asp Ser Glu Ala
580 585 590
Thr Val Gly Ala Ile Ser Asn Gly Pro Asp Cys Thr Pro Pro Ala Asn
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<213> Homo sapiens

<220>

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Gln Gly Thr Gly Thr Gly Ala Arg Ala Ala Gly Ala Leu Ala Ala Leu
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Leu Leu Ala Pro Thr Pro Asp Ser His Met Thr Pro Ala Pro Leu Ala
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<213> Homo sapiens

<220>
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 Glu Val Arg Glu Ile Glu Gln Arg His Thr Met Asp Gly Pro Arg Gln
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<211> 381

<212> PRT

<213> Homo sapiens

<400> 15231

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<212> DNA
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<222> (335).. (1855)

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 <212> PRT
 <213> Homo sapiens

<400> 15233

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		20					25						30		
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Glu	Gln	Thr	Ala	Ala	Asp	Glu	Val	Arg	Glu	Lys	Leu	Gly	Ser	Ser	Cys
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Lys	Ile	Ser	Arg	Asp	Arg	Gly	Lys	Ile	Tyr	Phe	Val	Ile	Ser	Val	Glu
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Ser	Leu	Ala	Gln	Val	His	Cys	Leu	Arg	Ser	Val	Asp	Asn	Leu	Phe	Val
			85					90						95	
Val	Val	Gln	Glu	Phe	Gln	Asp	Tyr	Gln	Phe	Lys	Gln	Thr	Lys	Glu	Glu
		100					105					110			
Val	Leu	Lys	Asp	Phe	Glu	Asp	Leu	Ala	Gly	Lys	Leu	Pro	Trp	Ser	Asn
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Ile	Lys	Glu	Asp	Val	Ser	Thr	Leu	Ile	Gly	Asp	Asp	Leu	Ala	Ser	Cys
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000220" 69462960

-9168/13211-

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                260                265                270
Asn Ile His Asp Asn Glu Val Ile Val Gly Ile Ala Leu Thr Glu Glu
                275                280                285
Ser Leu His Arg Arg Asn Ile Thr His Phe Gly Pro Thr Thr Leu Arg
290                295                300
Ser Thr Leu Ala Tyr Gly Met Leu Arg Leu Cys Asp Pro Leu Pro Tyr
305                310                315                320
Asp Ile Ile Val Asp Pro Met Cys Gly Thr Gly Ala Ile Pro Ile Glu
                325                330                335
Gly Ala Thr Glu Trp Ser Asp Cys Phe His Ile Ala Gly Asp Asn Asn
                340                345                350
Pro Leu Ala Val Asn Arg Ala Ala Asn Asn Ile Ala Ser Leu Leu Thr
                355                360                365
Lys Ser Gln Ile Lys Glu Gly Lys Pro Ser Trp Gly Leu Pro Ile Asp
370                375                380
Ala Val Gln Trp Asp Ile Cys Asn Leu Pro Leu Arg Thr Gly Ser Val
385                390                395                400
Asp Ile Ile Val Thr Asp Leu Pro Phe Gly Lys Arg Met Gly Ser Lys
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Lys Arg Asn Trp Asn Leu Tyr Pro Ala Cys Leu Arg Glu Met Ser Arg
                420                425                430
Val Cys Thr Pro Thr Thr Gly Arg Ala Val Leu Leu Thr Gln Asp Thr
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Lys Cys Phe Thr Lys Ala Leu Ser Gly Met Gln His Val Trp Arg Lys
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 <213> Homo sapiens

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<400> 15234

008220" 69462960

009240" 6942960

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<210> 15235
 <211> 486
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Thr His Ser Val Leu Ser Met Leu His Asn Pro Leu Gly Asn Val Leu

-9170/13211-

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65					70					75					80				
Leu	Val	Asp	Lys	Phe	Pro	Ala	Pro	Ser	Val	Arg	Gly	Ser	Arg	Leu	Asp				
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Thr	Arg	Pro	Ile	Leu	Asp	Ser	Arg	Ser	Ser	Ser	Pro	Ser	Asp	Ser	Asp				
			100					105					110						
Thr	Ser	Gly	Phe	Ser	Ser	Gly	Ser	Asp	His	Leu	Ser	Asp	Leu	Ile	Ser				
		115					120					125							
Ser	Leu	Arg	Ile	Ser	Pro	Pro	Leu	Pro	Phe	Leu	Ser	Leu	Ser	Gly	Gly				
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Lys	Arg	Trp	Pro	Gly	Ala	Ser	Val	Trp	Pro	Ser	Trp	Asp	Leu	Leu	Glu				
		180					185					190							
Ala	Pro	Lys	Asp	Pro	Phe	Ser	Ile	Glu	Arg	Glu	Ala	Arg	Leu	His	Arg				
	195					200				205									
Gln	Ala	Ala	Ala	Val	Asn	Glu	Ala	Thr	Cys	Thr	Trp	Ser	Gly	Gln	Leu				
210					215					220									
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Gly	Gly	Val	Pro	Trp	Asp	Ile	Thr	Glu	Ala	Gly	Leu	Val	Asn	Thr	Phe				
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Arg	Val	Phe	Gly	Ser	Leu	Ser	Val	Glu	Trp	Pro	Gly	Lys	Asp	Gly	Lys				
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His	Pro	Arg	Cys	Pro	Pro	Lys	Gly	Tyr	Val	Tyr	Leu	Val	Phe	Glu	Leu				
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Glu	Lys	Ser	Val	Arg	Ser	Leu	Leu	Gln	Ala	Cys	Ser	His	Asp	Pro	Leu				
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Ser	Pro	Asp	Gly	Leu	Ser	Glu	Tyr	Tyr	Phe	Lys	Met	Ser	Ser	Arg	Arg				
305				310					315						320				
Met	Arg	Cys	Lys	Glu	Val	Gln	Val	Ile	Pro	Trp	Val	Leu	Ala	Asp	Ser				
			325					330					335						
Asn	Phe	Val	Arg	Ser	Pro	Ser	Gln	Arg	Leu	Asp	Pro	Ser	Arg	Thr	Val				
		340					345					350							
Phe	Val	Gly	Ala	Leu	His	Gly	Met	Leu	Asn	Ala	Glu	Ala	Gln	Ala	Ala				
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Ile	Leu	Asn	Asp	Leu	Phe	Gly	Gly	Val	Val	Tyr	Ala	Gly	Ile	Asp	Thr				
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385				390					395						400				
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			405					410					415						
Thr	Thr	Lys	Phe	Thr	Lys	Lys	Val	Gln	Ile	Asp	Pro	Tyr	Leu	Glu	Asp				
		420					425					430							
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008240"69462960

-9171/13211-

435	440	445
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Lys Asn Arg Asp Ser Ser		480
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (426).. (1073)

<400> 15236

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009240"69462960

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<210> 15237

<211> 216

<212> PRT

<213> Homo sapiens

<400> 15237

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Gln Leu Pro Ser Gly Glu Asp Gln Asn Asp Trp Val Ala Val His Val
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Val Asp Phe Phe Asn Arg Ile Asn Leu Ile Tyr Gly Thr Ile Cys Glu
          65           70           75           80
Phe Cys Thr Glu Arg Thr Cys Pro Val Met Ser Gly Gly Pro Lys Tyr
          85           90           95
Glu Tyr Arg Trp Gln Asp Asp Leu Lys Tyr Lys Lys Pro Thr Ala Leu
          100          105          110
Pro Ala Pro Gln Tyr Met Asn Leu Leu Met Asp Trp Ile Glu Val Gln
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Ile Asn Asn Glu Glu Ile Phe Pro Thr Cys Val Gly Val Pro Phe Pro
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Lys Asn Phe Leu Gln Ile Cys Lys Lys Ile Leu Cys Arg Leu Phe Arg
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Val Phe Val His Val Tyr Ile His His Phe Asp Arg Val Ile Val Met
          165          170          175
Gly Ala Glu Ala His Val Asn Thr Cys Tyr Lys His Phe Tyr Tyr Phe
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008270.69462960

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210 215

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<212> DNA
<213> Homo sapiens

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 Gln Tyr Val Met Cys Ala Ala Thr Ser Pro Ala Val Lys Leu His Asp
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<212> PRT

<213> Homo sapiens

<400> 15247

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<213> Homo sapiens

<400> 15251

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 Asn Cys Tyr Thr Lys Leu Lys Asp Ser Ser Lys Leu Glu Glu Phe Ile
 100 105 110
 Lys Lys Lys Ser Glu Ser Glu Val His Phe Asp Val Glu Thr Ala Ile
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 Glu Asn His Ala His His Glu Trp Tyr Leu Lys Ile Gln Leu Glu Asp
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<212> DNA
<213> Homo sapiens

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<222> (160).. (921)

<400> 15256

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<211> 254
<212> PRT
<213> Homo sapiens

<400> 15257

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<212> DNA
<213> Homo sapiens

<400> 15258

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<210> 15259
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<220>
 <221> CDS
 <222> (519).. (2369)

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<212> PRT
<213> Homo sapiens

<400> 15260
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35 40 45
Asn Ser Glu Val Ser Val Phe Glu Val Asn Ile Arg Phe Ile Gly Gly
50 55 60
Leu Leu Ala Ala Tyr Tyr Leu Ser Gly Glu Glu Ile Phe Lys Ile Lys
65 70 75 80
Ala Val Gln Leu Ala Glu Lys Leu Leu Pro Ala Phe Asn Thr Pro Thr

008270-69462960

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 Arg Pro Ala Leu Pro His Pro Ser Val Ser His Gly Asn Gly Asp Gln
 485 490 495
 Gly Pro Ala Val Arg Gln Ala Asn Ser Ser Val Pro Gln Arg Ser Arg
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 His Pro Leu Gln Asp Ser Ser Gly Ser Lys Ile Arg Gln Pro Glu Arg
 515 520 525
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 Pro His Leu Ser Leu Ser Thr Gly Gly Ser Met Ile Leu Gly Arg Gln
 545 550 555 560
 Gln Pro Ala Thr Glu Lys Arg Gly Ser Ile Val Arg Phe Met Pro Asp
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 <212> DNA
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 <212> PRT
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Met Glu Pro Ser Ile Phe Asn Thr Leu Lys Arg Tyr Phe Gln Ala Gly
          50          55          60
Gly Ser Pro Glu Asn Val Ile Gln Leu Leu Ser Glu Asn Tyr Thr Ala
          65          70          75          80
Val Ala Gln Thr Val Asn Leu Leu Ala Glu Trp Leu Ile Gln Thr Gly
          85          90          95
Val Glu Pro Val Gln Val Gln Glu Thr Val Glu Asn His Leu Lys Ser
          100          105          110
Leu Leu Ile Lys His Phe Asp Pro Arg Lys Ala Asp Ser Ile Phe Thr
          115          120          125
Glu Glu Gly Glu Thr Pro Ala Trp Leu Glu Gln Met Ile Ala His Thr
          130          135          140
Thr Trp Arg Asp Leu Phe Tyr Lys Leu Ala Glu Ala His Pro Asp Cys
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Leu Met Leu Asn Phe Thr Val Lys Val Gly Arg Val Leu Glu Leu Arg
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<212> DNA
<213> Homo sapiens

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<222> (263).. (697)

<400> 15263

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<213> Homo sapiens

<400> 15264

<210> 15265
<211> 1621
<212> DNA
<213> Homo sapiens

<400> 15265

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 <212> PRT
 <213> Homo sapiens

<400> 15266

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Tyr	Met	Gly	His	Val	Lys	Gly	Tyr	Ile	Ser	His	Gln	His	Gln	Lys	Leu
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 <213> Homo sapiens

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             35             40             45
Thr Gly Pro Asn Lys Lys Ile Ala Lys Lys Asn Ala Ala Glu Ala Met
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Leu Leu Gln Leu Gly Tyr Lys Ala Ser Thr Asn Leu Gln Asp Gln Leu
             65             70             75             80
Glu Lys Thr Gly Glu Asn Lys Gly Trp Ser Gly Pro Lys Pro Gly Phe
             85             90             95
Pro Glu Pro Thr Asn Asn Thr Pro Lys Gly Ile Leu His Leu Ser Pro
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Asp Val Tyr Gln Glu Met Glu Ala Ser Arg His Lys Val Ile Ser Gly
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Thr Thr Leu Gly Tyr Leu Ser Pro Lys Asp Met Asn Gln Pro Ser Ser
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09629469.072800

-9211/13211-

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<210> 15273
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<212> PRT
<213> Homo sapiens

<400> 15273

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Glu	Glu	Lys	Lys	Lys	Lys	Arg	Ser	Gly	Phe	Arg	Asp	Arg	Lys	Val	
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<213> Homo sapiens

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<213> Homo sapiens

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35 40 45
Thr Leu Cys Leu Ile Gln Asn Lys Leu Lys Glu Glu Lys Arg Leu
50 55 60
Leu Lys Ser Gly Ser Asn Asp Asp Ser Asp Ile Asp Ile Gln Glu Asp
65 70 75 80
Asp Glu Ser Asp Ser Glu Leu Glu Glu Arg Arg Leu Pro Lys Pro Gln
85 90 95
Thr Ala Met Glu Met Leu Met Gln Gly Arg Pro Gly Lys Arg Ile Val
100 105 110
Gly Thr Met Gln Gly Gly Asp Ser Asp Asp Asn Glu Asp Ser Glu Glu
115 120 125
Ser Glu Ile Asp Met Glu Asp Asp Asp Asp Glu Asp Asp Asp Leu Glu
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<213> Homo sapiens

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<221> CDS
<222> (77).. (1531)

<400> 15276

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<212> PRT
<213> Homo sapiens

<400> 15277

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Ala Leu Leu Gln Gln Pro Leu Phe Met Ala Met Val Gly Pro Leu Lys						
	420		425		430	
Gly Glu Pro Phe Trp Val Asn Leu Gly Leu Leu Leu Phe Ser Leu Leu						
	435		440		445	
Gly Phe Leu Leu Pro Ser Tyr Leu Phe Tyr Tyr Arg Ala Arg Leu Gln						
	450		455		460	
Gln Glu Tyr Ala Ala Asn Gly Met Gly Pro Leu Lys Val Leu Ser Gly						
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<210> 15278
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (164).. (1039)

<400> 15278

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<211> 292

<212> PRT

<213> Homo sapiens

<400> 15279

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	210					215					220				
Phe	Asp	Gln	Pro	Lys	Ile	Glu	Asp	Pro	Tyr	Ala	Ile	Ser	Phe	Ser	Pro
225					230					235					240
Trp	Asn	Pro	Ser	Val	His	Asp	Glu	Ala	Arg	Glu	Lys	Met	Leu	Thr	Gln
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260 265 270
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Thr Val Ala Thr
290

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<213> Homo sapiens

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<222> (154).. (801)

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09629469.072800

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1889

<210> 15281
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<212> PRT
<213> Homo sapiens

<400> 15281
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35 40 45
Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe
50 55 60
Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr
65 70 75 80
Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His
85 90 95
Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro
100 105 110
Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp
115 120 125
Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe
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Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala
145 150 155 160
His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu
165 170 175
Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu
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Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile
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Glu Lys Leu Gly Ser Lys Asp Arg
210 215

<210> 15282
<211> 1896
<212> DNA
<213> Homo sapiens

<400> 15282
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008270" 69462960

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<210> 15283
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 <212> DNA
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<220>
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 <222> (469).. (1275)

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<210> 15284
 <211> 269
 <212> PRT
 <213> Homo sapiens

<400> 15284

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		20					25					30			
Tyr	Val	Asp	Glu	Thr	Leu	Phe	Gly	Ser	Pro	Ala	Gly	Thr	Arg	Pro	Thr
		35				40					45				
Pro	Pro	Asp	Phe	Asp	Pro	Pro	Trp	Val	Glu	Lys	Ala	Asn	Arg	Thr	Arg
		50				55					60				
Gly	Val	Gly	Lys	Glu	Ala	Ser	Lys	Ala	Leu	Gly	Ala	Lys	Gly	Ser	Cys
		65			70				75					80	
Glu	Thr	Thr	Pro	Ser	Arg	Gly	Ser	Thr	Pro	Thr	Leu	Thr	Pro	Arg	Lys
			85					90						95	
Lys	Asn	Lys	Tyr	Arg	Pro	Ile	Ser	His	Thr	Pro	Ser	Tyr	Cys	Asp	Glu
		100					105					110			
Ser	Leu	Phe	Gly	Ser	Arg	Ser	Glu	Gly	Ala	Ser	Phe	Gly	Ala	Pro	Arg
		115					120					125			
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145	150	155
Leu Arg Ala Ile His Pro Ala Gly Pro Ser Lys Thr Glu Pro Gly Pro		160
	165	170
Ala Ala Asp Ser Gln Lys Leu Ser Met Gly Gly Leu His Ser Ser Arg		175
	180	185
Pro Leu Lys Arg Gly Leu Ser His Ser Leu Thr His Leu Asn Val Pro		190
	195	200
Ser Thr Gly His Pro Ala Thr Ser Ala Pro His Thr Asn Gly Pro Gln		205
	210	215
Asp Leu Arg Pro Ser Thr Ser Gly Val Thr Phe Arg Ser Pro Leu Val		220
225	230	235
Thr Ser Arg Ala Arg Ser Val Ser Ile Ser Val Pro Ser Thr Pro Arg		240
	245	250
Arg Gly Gly Ala Thr Gln Lys Pro Lys Pro Pro Trp Lys		255
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<210> 15285
 <211> 1767
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (217).. (786)

<400> 15285

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008240"69462960


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<210> 15286
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 15286

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		20					25					30			
Ser	Ala	Val	Arg	Pro	Gly	Ser	Arg	Gly	Ser	Gly	Ala	Arg	Glu	Leu	Gly
		35				40					45				
Phe	Pro	Gln	Gln	Lys	Thr	Gln	Arg	His	Gln	Gly	Ser	Pro	Ala	Gly	
	50					55				60					
Trp	Ala	Arg	Glu	Asp	Val	Val	Ala	Gly	Ser	Leu	Leu	Arg	Ala	Asp	Gly
	65				70					75				80	
Arg	Arg	His	His	Gly	Gly	Gly	Gly	Ser	Arg	Pro	Ala	Pro	Arg	Arg	Lys
			85					90					95		
Ser	Pro	Leu	Pro	Ala	Ala	Ala	Arg	Ala	Pro	Ser	Pro	Ala	Arg	Pro	Arg
		100						105					110		
Arg	Pro	His	Ala	Cys	Arg	Asp	Gly	Gly	Gly	Gly	Ala	Gly	Lys	Pro	Gly
		115					120					125			
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	130					135					140				
Gly	Leu	Phe	Arg	Phe	Thr	Gly	Leu	Ala	Ala	Arg	Pro	Ser	Val	Arg	Glu
	145				150					155					160
His	Glu	Trp	Pro	Gly	Glu	Arg	Gly	Leu	Ala	Ala	Arg	Val	Arg	Thr	Ala
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<210> 15287
 <211> 1745
 <212> DNA

008220"69462960

<213> Homo sapiens

<220>

<221> CDS

<222> (221).. (793)

<400> 15287

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<210> 15288

<211> 191

<212> PRT

<213> Homo sapiens

<400> 15288

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<210> 15289
 <211> 2032
 <212> DNA
 <213> Homo sapiens

<400> 15289

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<210> 15290
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 <212> PRT
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Phe Trp Pro Gln Ser Ile Pro Tyr Gln Asn Leu Gly Pro Leu Gly Pro
          35          40          45
Phe Thr Gln Tyr Leu Val Asp His His His Thr Leu Leu Cys Asn Gly
          50          55          60
Tyr Trp Leu Ala Trp Leu Ile His Val Gly Glu Ser Leu Tyr Ala Ile
          65          70          75          80
Ala Leu Cys Lys His Lys Gly Ile Thr Ser Gly Arg Ala Gln Leu Leu
          85          90          95
Trp Phe Leu Gln Thr Phe Phe Phe Gly Ile Ala Ser Leu Thr Ile Leu
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<210> 15291
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 <212> DNA

009270" 69462960


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<210> 15293

<211> 492

<212> PRT

<213> Homo sapiens

<400> 15293

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Ser Ala Ser Val Thr Ser Val Arg Ser Arg Thr Arg Ser Ser Ser Gly
      35             40             45
Thr Gly Leu Ser Ser Pro Pro Leu Ala Thr Gln Thr Val Val Pro Leu
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Gln His Cys Lys Ile Pro Glu Leu Pro Val Gln Ala Ser Ile Leu Phe
      65             70             75             80
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-9233/13211-

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145 150 155 160
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165 170 175
Arg Ser Leu Ile His Leu Phe Arg Thr Tyr Ser Phe Leu Asn Leu Leu
180 185 190
Phe Leu Cys Tyr Pro Phe Gly Met Tyr Ile Pro Phe Leu Gln Leu Asn
195 200 205
Cys Asp Leu Arg Lys Thr Ser Leu Phe Asn His Met Ala Ser Met Gly
210 215 220
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245 250 255
Asp Ala Met Pro Thr His Ala Cys Cys Leu Ser Pro Ser Leu Ile Arg
260 265 270
Ser Glu Val Glu Phe Leu Lys Met Asp Phe Asn Trp Arg Met Lys Glu
275 280 285
Val Leu Val Ser Ser Met Leu Ser Ala Tyr Tyr Val Ala Phe Val Pro
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Val Trp Phe Val Lys Asn Thr His Tyr Tyr Asp Lys Arg Trp Ser Cys
305 310 315 320
Glu Leu Phe Leu Leu Val Ser Ile Ser Thr Ser Val Ile Leu Met Gln
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Val Lys His Ser Lys Asn Val Tyr Lys Ala Val Gly His Tyr Asn Val
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405 410 415
Lys Pro Leu Arg Ile Leu Asn Ile Leu Leu Leu Leu Glu Gly Ala Val
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<210> 15294
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<212> DNA
<213> Homo sapiens.

<400> 15294

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<220>

<221> CDS

<222> (252).. (1634)

<400> 15295

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<212> PRT

<213> Homo sapiens

<400> 15296

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			20					25					30		
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Val	Leu	Leu	Pro	Cys	Ile	His	His	Phe	Leu	Val	Ile	Ile	Ser	Arg	Lys
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Ser	Ser	Asp	Arg	Ala	Leu	Arg	Lys	Gln	Gln	Gln	Leu	Asn	Asn	Leu	Val
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Tyr	Val	Val	Thr	Asn	Gln	Ala	Lys	Pro	Gly	Asp	Arg	Ile	Val	Asp	Phe
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 <212> DNA
 <213> Homo sapiens

<400> 15297

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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 15306

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Leu Ala Ser Thr Lys Pro Gly Thr Ser Ser Ala Pro Phe Thr Ile Asn
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Val Val Ala Ser Ala Ser Gln Lys Gly Thr Leu Ile Arg Leu Phe Asp
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Thr Gln Ser Lys Glu Lys Leu Val Glu Leu Arg Arg Gly Thr Asp Pro
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Ala Ser Ser Asp Lys Gly Thr Val His Ile Phe Ala Leu Lys Asp Thr
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Arg Leu Asn Arg Arg Ser Ala Leu Ala Arg Val Gly Lys Val Gly Pro
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Val Pro Ala Glu Ser Ala Cys Ile Cys Ala Phe Gly Arg Asn Thr Ser
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Lys Asn Cys Arg Ala Glu Pro Trp Gln Trp Gly Val Leu Gly Ser His
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Gln Pro Ala Ser Ile Asn Gly Ala Gly Ala His Phe Pro Leu Ser Arg
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<212> DNA

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<213> Homo sapiens

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<400> 15307

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<212> PRT

<213> Homo sapiens

<400> 15308

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Gln Val Thr Val Val Ser Ser Asp Met Arg Glu Trp Val Ala Pro Glu
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<212> DNA
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		100						105					110		
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	115					120						125			
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<210> 15321

008220" 69462960

<211> 1862
<212> DNA
<213> Homo sapiens

<220>
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<222> (31).. (972)

<400> 15321

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<211> 314
<212> PRT
<213> Homo sapiens

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<400> 15322

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			20					25					30		
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225					230					235					240
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<212> DNA

<213> Homo sapiens

009220"69462960

<220>
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<222> (42).. (560)

<400> 15323

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<210> 15324
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<212> PRT
<213> Homo sapiens

<400> 15324

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Phe	Trp	Ala	Leu	Ile	Gln	Gln
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Gly	Arg	Leu	Gln	Gly	Thr	Leu
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Ser	Glu	Phe	Asn	Ile	Asn	Tyr
	100		105		110	
Gly	Thr	Val	Leu	Ile	Trp	Gln
115		120		125		
Ile	Lys	Leu	Pro	Thr	Glu	Met
130		135		140		
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145		150		155		160
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 <212> DNA
 <213> Homo sapiens

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 <222> (63).. (896)

<400> 15325

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 <213> Homo sapiens

<400> 15326

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		115					120					125			
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225	230	235
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 <212> DNA
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<400> 15327

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-9265/13211-

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<212> PRT

<213> Homo sapiens

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Pro Pro Gly Asn Glu Val Val Asn Gly Glu Asn Leu Ser Phe Ala Tyr
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Glu Phe Lys Ala Asp Ala Leu Phe Asp Phe Phe Tyr Trp Phe Gly Leu
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Gln Ser Phe Ala Ser Lys Thr Gly Ser Glu Thr Lys Ile Thr Tyr Ser

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<212> PRT

<213> Homo sapiens

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Glu	Thr	Thr	Pro	Ser	Arg	Gly	Ser	Thr	Pro	Thr	Leu	Thr	Pro	Arg	Lys
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Lys	Asn	Lys	Tyr	Arg	Pro	Ile	Ser	His	Thr	Pro	Ser	Tyr	Cys	Asp	Glu
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Ser	Leu	Phe	Gly	Ser	Arg	Ser	Glu	Gly	Ala	Ser	Phe	Gly	Ala	Pro	Arg
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<213> Homo sapiens

<220>
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<210> 15337
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Glu Leu Trp Val Gly Met Pro Ala Trp Tyr Val Ala Ala Cys Arg
 50 55 60
 Ala Asn Val Lys Ser Gly Ala Ile Met Ser Ala Leu Ser Asp Thr Glu
 65 70 75 80
 Ile Gln Arg Glu Ile Gly Ile Ser Asn Ala Leu His Arg Leu Lys Leu
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 Arg Leu Ala Ile Gln Glu Met Val Ser Leu Thr Ser Pro Ser Ala Pro
 100 105 110
 Pro Thr Ser Arg Thr Ser Ser Gly Asn Val Trp Val Thr His Glu Glu
 115 120 125
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 130 135 140
 Met Asn His Glu Trp Ile Gly Asn Glu Trp Leu Pro Ser Leu Gly Leu
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 Pro Gln Tyr Arg Ser Tyr Phe Met Glu Cys Leu Val Asp Ala Arg Met
 165 170 175
 Leu Asp His Leu Thr Lys Lys Asp Leu Arg Val His Leu Lys Met Val
 180 185 190
 Asp Ser Phe His Arg Thr Ser Leu Gln Tyr Gly Ile Met Cys Leu Lys
 195 200 205
 Arg Leu Asn Tyr Asp Arg Lys Glu Leu Glu Lys Arg Arg Glu Glu Ser
 210 215 220
 Gln His Glu Ile Lys Asp Val Leu Val Trp Thr Asn Asp Gln Val Val
 225 230 235 240
 His Trp Val Gln Ser Ile Gly Leu Arg Asp Tyr Ala Gly Asn Leu His
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 Glu Ser Gly Val His Gly Ala Leu Leu Ala Leu Asp Glu Asn Phe Asp
 260 265 270

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His Asn Thr Leu Ala Leu Ile Leu Gln Ile Pro Thr Gln Asn Thr Gln
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290 295 300
Thr Asp Arg Lys Leu Asp Asp Gly Asp Asp Lys Val Phe Arg Arg Ala
305 310 315 320
Pro Ser Trp Arg Lys Arg Phe Arg Pro Arg Glu His His Gly Arg Gly
325 330 335
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<210> 15338

<211> 2200

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (722).. (1720)

<400> 15338

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<210> 15339

<211> 333

<212> PRT

<213> Homo sapiens

<400> 15339

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Trp Glu Val Met Ile Pro Ala Tyr Ser Lys Asn Arg Ala Tyr Ala Ile
          35          40          45
Phe Phe Ile Val Phe Thr Val Ile Gly Ser Leu Phe Leu Met Asn Leu
          50          55          60
Leu Thr Ala Ile Ile Tyr Ser Gln Phe Arg Gly Tyr Leu Met Lys Ser
          65          70          75          80
Leu Gln Thr Ser Leu Phe Arg Arg Arg Leu Gly Thr Arg Ala Ala Phe
          85          90          95
Glu Val Leu Ser Ser Met Val Gly Glu Gly Gly Ala Phe Pro Gln Ala
          100          105          110
Val Gly Val Lys Pro Gln Asn Leu Leu Gln Val Leu Gln Lys Val Gln
          115          120          125
Leu Asp Ser Ser His Lys Gln Ala Met Met Glu Glu Val Arg Ser Tyr
          130          135          140
Gly Ser Val Leu Leu Ser Ala Glu Glu Phe Gln Lys Leu Phe Asn Glu
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Leu Asp Arg Ser Val Val Lys Glu His Pro Pro Arg Pro Glu Tyr Gln
          165          170          175
Ser Pro Phe Leu Gln Ser Ala Gln Phe Leu Phe Gly His Tyr Tyr Phe
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Asp Tyr Leu Gly Asn Leu Ile Ala Leu Ala Asn Leu Val Ser Ile Cys

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245					250					255					
Leu	Trp	Trp	Leu	Val	Ser	Ser	Val	Ile	Trp	Val	Asn	Leu	Phe	Leu	Ala
260					265					270					
Leu	Ile	Leu	Glu	Asn	Phe	Leu	His	Lys	Trp	Asp	Pro	Arg	Ser	His	Leu
275					280					285					
Gln	Pro	Leu	Ala	Gly	Thr	Pro	Glu	Ala	Thr	Tyr	Gln	Met	Thr	Val	Glu
290					295					300					
Leu	Leu	Phe	Arg	Asp	Ile	Leu	Glu	Glu	Pro	Glu	Glu	Asp	Glu	Leu	Thr
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 <211> 1897
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (589).. (1896)

<400> 15340

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<210> 15341
 <211> 436
 <212> PRT
 <213> Homo sapiens

<400> 15341

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		20					25					30			
Ser	Val	Ser	Glu	Lys	Asn	Ser	Tyr	His	Pro	Val	Ser	Leu	Met	Thr	Ser
		35					40					45			
Phe	Ser	Glu	Pro	Asp	Leu	Gly	Gln	Ser	Phe	Ser	Leu	Tyr	Val	Ser	Ser
	50				55						60				
Ser	Glu	Glu	Glu	Leu	Pro	Asn	Leu	Glu	Lys	Glu	Tyr	Pro	Arg	Lys	Asn
	65				70				75						80
Arg	Met	Met	Thr	Tyr	Ala	Lys	Glu	Leu	Ile	Asn	Asn	Met	Trp	Thr	Asp
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Phe	Cys	Val	Glu	Asp	Tyr	Ile	Arg	Cys	Lys	Asp	Thr	Gly	Phe	His	Ala
		100					105						110		
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Glu	Ser	Met	Lys	Ser	Lys	Ser	Asp	Ile	Glu	Met	Val	His	Lys	Ala	Leu
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Gln	Lys	Glu	Glu	Arg	Arg	Arg	Ser	Leu	Lys	Glu	Lys	Ser	Lys	Glu	Ala
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Gly Ser Thr Thr Asn Asp Lys Leu Lys Glu Glu Glu Leu Tyr Arg Asn				
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Leu Pro Cys Arg Ser Ala Cys Gly Cys Arg Asn Pro Arg Cys Pro Glu				
	290		295	300
Gln Ala Val Lys Leu Lys Cys Lys His Lys Val Arg Cys Pro Thr Pro				
305		310		320
Asp Phe Glu Asp Leu Pro Glu Arg Tyr Gln Lys His Leu Ser Glu His				
	325		330	335
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	340		345	350
Ser Pro His Ala Ser Ile Lys Arg Glu Lys Ile Leu Ala Asp Ile Glu				
	355		360	365
Ala Asp Glu Glu Asn Leu Lys Glu Thr Arg Trp Pro Tyr Leu Ser Pro				
	370		375	380
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Asn Cys Asn Pro Pro Val Pro Thr Val Ser Ser Arg Gly Arg Glu Gln				
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 <212> DNA
 <213> Homo sapiens

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 <222> (1328).. (2395)

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000220" 59462960

<213> Homo sapiens

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008240" 69462960

<213> Homo sapiens

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<222> (158).. (1192)

<400> 15346

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<212> PRT

<213> Homo sapiens

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Val Cys Gln Thr Cys Val Ser Asn Leu Cys Val Gln Gly Leu Cys Leu
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008270" 69462960

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<210> 15351
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 <212> PRT
 <213> Homo sapiens

<400> 15351

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		20						25					30		
Asp	Lys	Glu	Ser	Met	Ala	Ile	Ile	Lys	Leu	Asn	Asn	Thr	Thr	Val	Leu
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Tyr	Leu	Lys	Glu	Val	Thr	Lys	Phe	Leu	Ala	Leu	Val	Cys	Ile	Leu	Arg
	50					55					60				
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<210> 15352
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<220>
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 <222> (254).. (709)

009240"69462960

<400> 15352

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<210> 15353

<211> 152

<212> PRT

<213> Homo sapiens

<400> 15353

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Thr Trp Arg Thr Arg Ser Ser Pro Val Arg Lys Leu Glu Lys Val Glu
        35             40             45

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Ser	Gln	Arg	Pro	Cys	Gln	Ala	Pro	Leu	Gly	Ser	Gly	Val	Leu	Gln	Pro
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Leu	Arg	Ile	Val	Pro	His	Val	Ala	Leu	Arg	Val	Ala	Leu	Glu	Ala	Arg
			100					105					110		
Ala	Gly	Thr	Pro	Val	Met	Arg	Ser	Gly	Ala	Ala	Ser	Gly	Ala	Ala	Val
		115					120					125			
Gly	Pro	Val	Pro	Pro	Pro	Ala	Cys	Ser	Ser	Pro	Gln	His	Leu	Pro	Thr
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<210> 15354
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 <212> DNA
 <213> Homo sapiens

<400> 15354

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008220" 69462960


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 <213> Homo sapiens

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             35             40             45
Gln Ala Ser Val Gly Ala Val Val Thr Leu Asp Ser Ser Asn Pro Ala
             50             55             60
Ala Val Leu His Leu Gln Leu Asn Tyr Thr Leu Leu Asp Gly Arg Tyr
             65             70             75             80
Leu Ser Glu Glu Pro Glu Pro Tyr Leu Ala Val Tyr Leu His Ser Glu
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Pro Arg Pro Asn Glu His Asn Cys Ser Ala Ser Arg Arg Ile Arg Pro
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09629469 072800

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His	Phe	Arg	Leu	Ser	Ala	Leu	Glu	Val	Ser	Val	Gly	Leu	Tyr	Thr	Ser
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Leu	Cys	Gln	Tyr	Phe	Ser	Glu	Glu	Asp	Val	Val	Trp	Arg	Thr	Glu	Gly
				165					170					175	
Leu	Leu	Pro	Leu	Glu	Glu	Thr	Ser	Pro	Arg	Gln	Ala	Val	Cys	Leu	Thr
		180						185					190		
Arg	His	Leu	Thr	Ala	Phe	Gly	Ala	Ser	Leu	Phe	Ala	Pro	Pro	Ser	His
		195					200					205			
Val	Arg	Phe	Val	Phe	Pro	Glu	Pro	Thr	Ala	Asp	Val	Asn	Tyr	Ile	Val
	210					215					220				
Met	Leu	Thr	Cys	Ala	Val	Cys	Leu	Val	Thr	Tyr	Met	Val	Met	Ala	Ala
225					230					235					240
Ile	Leu	His	Lys	Leu	Asp	Gln	Leu	Asp	Ala	Ser	Arg	Gly	Arg	Ala	Ile
			245						250					255	
Pro	Phe	Cys	Gly	Gln	Arg	Gly	Arg	Phe	Glu	Tyr	Glu	Ile	Leu	Val	Lys
		260						265				270			
Thr	Gly	Trp	Gly	Arg	Gly	Ser	Gly	Thr	Thr	Ala	His	Val	Gly	Ile	Met
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Leu	Tyr	Gly	Val	Asp	Ser	Arg	Ser	Gly	His	Arg	His	Leu	Asp	Gly	Asp
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		340						345					350		
Thr	Ala	His	Ser	Thr	Phe	Phe	Leu	Val	Asn	Asp	Trp	Leu	Ser	Val	Glu
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Thr	Glu	Ala	Asn	Gly	Gly	Leu	Val	Glu	Lys	Glu	Val	Leu	Ala	Ala	Ser
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His	Ala	Ala	Leu	Leu	Arg	Phe	Arg	Arg	Leu	Leu	Val	Ala	Glu	Leu	Gln
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Cys	Gly	Phe	Phe	Asp	Lys	His	Ile	Trp	Leu	Ser	Ile	Trp	Asp	Arg	Pro
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Pro	Arg	Ser	Cys	Phe	Thr	Arg	Ile	Gln	Arg	Ala	Thr	Cys	Cys	Val	Leu
		420						425					430		
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		435					440					445			
Ser	Asp	Ser	Ala	Tyr	Ser	Thr	Gly	His	Val	Ser	Arg	Leu	Ser	Pro	Leu
	450					455					460				
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465					470					475					480
Pro	Val	Tyr	Leu	Ala	Ile	Leu	Phe	Leu	Phe	Trp	Met	Ser	Arg	Ser	Lys
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 <213> Homo sapiens

<220>
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<213> Homo sapiens

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		20						25					30		
Val	Thr	Thr	His	Ile	Pro	Phe	Pro	Gln	Thr	Lys	Pro	His	Ile	Ala	Arg
		35					40					45			
Cys	Val	Phe	Thr	Glu	Ser	Ser	Lys	Ile	Leu	Leu	Gly	Leu	Trp	Val	Gln
	50					55					60				
Asp	Gly	Glu	Cys	Ser	Glu	Ile	Met	Thr	Gly	Ala	Trp	Ser	Cys	Arg	Ala
65					70				75						80
Leu	Arg	Arg	Lys	Ser	Arg	Asn	Leu	Phe	Ser	Glu	Gln	Leu	Lys	Ile	Ile
			85						90					95	
Pro	Lys	Asp	Leu	His	Phe	Arg	Asn	Thr	Met	Leu	Ser	Ser	Cys	Ile	Arg
		100						105					110		
Asn	Gln	Leu	Gly	Gly	Pro	Phe	Leu	Leu	Glu	Val	Glu	Asn	Asn	Glu	Arg
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<400> 15359

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09629469.072800

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<210> 15360
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 <212> PRT
 <213> Homo sapiens

<400> 15360

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Pro	Pro	His	Thr	Val	Asn	Thr	Leu	Phe	Leu	Thr	Asn	Asp	Leu	Thr	Glu
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Glu	Val	Met	Glu	Glu	Val	Leu	Gln	Lys	Lys	Ala	Asp	Leu	Ile	Leu	Ser
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Tyr	His	Pro	Pro	Ile	Phe	Arg	Pro	Met	Lys	Arg	Ile	Thr	Trp	Asn	Thr
	65				70					75				80	
Trp	Lys	Glu	Arg	Leu	Val	Ile	Arg	Ala	Leu	Glu	Asn	Arg	Val	Gly	Ile
				85					90					95	
Tyr	Ser	Pro	His	Thr	Ala	Tyr	Asp	Ala	Ala	Pro	Gln	Gly	Val	Asn	Asn
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Ser	Asp	Leu	Arg	Asp	Met	Leu	Asp	Ser	His	Leu	Glu	Asn	Lys	Ile	Asn
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 <213> Homo sapiens

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 <222> (237).. (1082)

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<210> 15362

<211> 282

<212> PRT

<213> Homo sapiens

<400> 15362

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Val Phe Glu Lys Tyr Gly Arg Val Gly Asp Val Tyr Ile Pro Arg Glu
          35          40          45
Pro His Thr Lys Ala Pro Arg Gly Phe Ala Phe Val Arg Phe His Asp
          50          55          60
Arg Arg Asp Ala Gln Asp Ala Glu Ala Ala Met Asp Gly Ala Glu Leu
          65          70          75          80
Asp Gly Arg Glu Leu Arg Val Gln Val Ala Arg Tyr Gly Arg Arg Asp
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Leu Pro Arg Ser Arg Gln Gly Glu Pro Arg Gly Arg Ser Arg Gly Gly
          100          105          110
Gly Tyr Gly Arg Arg Ser Arg Ser Tyr Gly Arg Arg Ser Arg Ser Pro
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Arg Arg Arg His Arg Ser Arg Ser Arg Gly Pro Ser Cys Ser Arg Ser
          130          135          140
Arg Ser Arg Ser Arg Tyr Arg Gly Ser Arg Tyr Ser Arg Ser Pro Tyr
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Ser Arg Ser Pro Tyr Ser Arg Ser Arg Tyr Ser Arg Ser Pro Tyr Ser
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<210> 15364
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (158).. (1405)

<400> 15364

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<213> Homo sapiens

<400> 15365

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Asn	Lys	Leu	Phe	Gln	Leu	Pro	Thr	Pro	Pro	Leu	Ser	Arg	His	Gln	Leu
		35					40					45			
Lys	Arg	Leu	Glu	Glu	His	Arg	Tyr	Gln	Ser	Ala	Gly	Arg	Ser	Leu	Leu
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Glu	Pro	Leu	Met	Gln	Gly	Tyr	Trp	Glu	Trp	Leu	Val	Arg	Arg	Val	Pro
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Ser	Trp	Ile	Ala	Pro	Asn	Leu	Ile	Thr	Ile	Ile	Gly	Leu	Ser	Ile	Asn
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Ile	Cys	Thr	Thr	Ile	Leu	Leu	Val	Phe	Tyr	Cys	Pro	Thr	Ala	Thr	Glu
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Gln	Ala	Pro	Leu	Trp	Ala	Tyr	Ile	Ala	Cys	Ala	Cys	Gly	Leu	Phe	Ile
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Tyr	Gln	Ser	Leu	Asp	Ala	Ile	Asp	Gly	Lys	Gln	Ala	Arg	Arg	Thr	Asn
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1788

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35 40 45
Gly Ile Val Ala Gly Ser Leu Val Lys Leu Pro Gln Val Phe Lys
50 55 60
Ile Leu Gly Ala Lys Ser Ala Ala Gly Leu Lys Lys Glu Asp Glu Ala
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Arg Pro Val Arg Ser Ala Ser Met Arg Val Arg Gly Gly Leu Gly Ala
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<213> Homo sapiens

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35 40 45
Thr Leu Leu Gln Asp His Ile Arg Asp Leu Asp Val Val Val Val Ser
50 55 60
Val Ala Gly Ala Phe Arg Lys Gly Lys Ser Phe Ile Leu Asp Phe Met
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100 105 110
Asp Pro Glu Thr Thr Gly Ile Gln Ile Trp Ser Glu Val Phe Thr Val
115 120 125
Glu Lys Pro Gly Gly Lys Lys Val Ala Val Val Leu Met Asp Thr Gln
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Gly Ala Phe Asp Ser Gln Ser Thr Val Lys Asp Cys Ala Thr Ile Phe
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Leu	Ile	Ala	Leu	Leu	Thr	Trp	Gly	Tyr	Ile	Arg	Tyr	Ser	Gly	Gln	Tyr
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Arg	Glu	Leu	Gly	Gly	Ala	Ile	Asp	Phe	Gly	Ala	Ala	Tyr	Val	Leu	Glu
			500					505					510		
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<210> 15370
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 <213> Homo sapiens

<220>
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 <222> (317).. (985)

<400> 15370

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 <213> Homo sapiens

<400> 15371

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			20					25					30		
Val	Thr	Leu	Gln	Ala	Arg	Ala	Asp	Ser	Pro	Thr	Val	Pro	Glu	Pro	Val
		35					40				45				
His	Arg	Pro	Gln	Asp	Pro	Trp	His	Ile	Pro	Gly	Val	Pro	Glu	Pro	Val
	50					55				60					
His	Arg	Pro	Gln	Asp	Pro	Trp	His	Ile	Pro	Gly	Val	Pro	Glu	Pro	Val
65					70					75					80
His	Arg	Pro	Gln	Asp	Pro	Trp	His	Ile	Pro	Gly	Val	Pro	Glu	Pro	Val
			85						90					95	
His	Arg	Pro	Gln	Asp	Pro	Trp	His	Ile	Pro	Gly	Val	Pro	Glu	Pro	Val
		100						105				110			
His	Arg	Pro	Gln	Asp	Pro	Trp	Pro	Trp	Leu	Gln	Leu	Val	Pro	Pro	Ala
	115						120					125			
Glu	Leu	Ala	Tyr	Cys	Leu	Leu	Met	Leu	Leu	Leu	Ala	His	Cys	Met	Lys
	130					135					140				
Gln	Gln	Ala	Arg	Pro	Gly	His	Pro	Asp	Phe	Leu	His	Arg	Glu	Ala	Trp
145					150					155					160
Ala	Cys	Leu	Ser	Ala	Ala	Gly	Gly	Leu	Ala	Ser	Pro	Gly	Leu	Leu	Leu
			165						170					175	
Trp	Ala	Thr	Ala	Arg	Pro	Arg	Ala	Ser	Gly	Glu	Ala	Gly	Pro	Gly	Arg
		180						185					190		
Ala	Leu	Val	Gly	Ala	Asp	Ala	Ala	Cys	Cys	Pro	Arg	His	Ser	Val	Leu
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 <212> DNA
 <213> Homo sapiens

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Ser Glu Val Phe Cys Asp Ser Leu Glu Gln Leu Glu Pro Glu Leu Val
180 185 190
Trp Thr Glu Gln Arg Ala Ala Ser Gly Gly Lys Arg Asp Pro Arg Asn
195 200 205
Ser Pro Val Pro Pro Thr Lys Lys Glu Gly Leu Arg Gly Ser Pro Pro
210 215 220
Gly Pro Gln Glu Leu Asp Val Trp Leu Leu Gly Thr Val Arg Ala Leu
225 230 235 240
Gln Glu Ser Met Gln Glu Val Gln Ala Arg Val Gln Ser Leu Glu Ser
245 250 255
Met Pro Arg Pro Pro Glu Gln Arg Pro Gln Pro Arg Pro Ser Ala Arg
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Pro Trp Pro Leu Gly Leu Pro Gly Pro Ala Leu Leu Phe Leu Leu
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Arg
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<212> DNA
<213> Homo sapiens

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<222> (460).. (1233)

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<400> 15375

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			20					25					30		
Glu	Ala	Gln	Leu	Asp	Ser	Glu	Asp	Pro	Glu	Gly	Pro	Arg	Pro	Ser	Phe
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Ala	Ala	His	Val	Val	Gly	Ser	Gln	Thr	Leu	Ala	Ser	Arg	Leu	Gln	Thr
		65			70				75					80	
Ser	Ile	Lys	Gly	Ser	Glu	Ala	Glu	Ser	Thr	Pro	Pro	Ser	Phe	Met	Ser
				85					90					95	
Val	His	Ala	Gln	Leu	Ala	Gly	Ser	Leu	Gly	Gly	Gln	Pro	Ala	Pro	Ile
			100					105				110			
Gln	Thr	Gln	Ser	Leu	Ser	His	Asp	Pro	Val	Ser	Gly	Thr	Gln	Gly	Leu
		115				120					125				
Glu	Lys	Lys	Val	Ser	Pro	Asp	Pro	Gln	Lys	Ser	Ser	Glu	Asp	Ile	Arg
		130				135					140				
Thr	Glu	Ala	Leu	Ala	Lys	Glu	Ile	Val	His	Gln	Asp	Lys	Ser	Leu	Ala

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 <212> PRT
 <213> Homo sapiens

<400> 15377

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Lys	Asp	Ala	Gln	Glu	Lys	Leu	Glu	Leu	Thr	Glu	Lys	Lys	Ala	Ser	Asp	65	70	75	80
Ala	Glu	Gly	Asp	Val	Ala	Ala	Leu	Asn	Arg	Arg	Ile	Gln	Leu	Val	Glu	85	90	95	
Glu	Glu	Leu	Asp	Arg	Ala	Gln	Glu	Arg	Leu	Ala	Thr	Ala	Leu	Gln	Lys	100	105	110	
Leu	Glu	Glu	Ala	Glu	Lys	Ala	Ala	Asp	Glu	Ser	Glu	Arg	Gly	Met	Lys	115	120	125	
Val	Ile	Glu	Asn	Arg	Ala	Met	Lys	Asp	Glu	Glu	Lys	Met	Glu	Ile	Gln	130	135	140	
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Lys	Tyr	Glu	Glu	Val	Ala	Arg	Lys	Leu	Val	Ile	Leu	Glu	Gly	Glu	Leu	165	170	175	
Glu	Arg	Ala	Glu	Glu	Arg	Ala	Glu	Val	Ser	Glu	Leu	Lys	Cys	Gly	Asp	180	185	190	
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Ile	Lys	Leu	Leu	Ser	Asp	Lys	Leu	Lys	Glu	Ala	Glu	Thr	Arg	Ala	Glu	225	230	235	240
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280

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<213> Homo sapiens

<220>
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<222> (402).. (749)

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Cys	Ile	Ser	Ser	Val	Ile	Thr	Ala	Trp	Leu	Ile	Asn	His	Cys	Phe	Arg			
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Phe	Pro	Trp	Arg	Arg	Gly	Ser	His	Lys	Gly	Gln	Ala	Arg	Ser	His	Trp			
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Val	Leu	Gln	Asp	Phe	Pro	Gly	Gln	Gly	Arg	Gly	Gly	Val	Arg	Ser	Pro			
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Thr	Ala	Thr	Thr	Arg	Gly	Phe	Gly	Asp	Cys	Ala	Val	Trp	Trp	Val	Phe			
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<212> PRT
<213> Homo sapiens

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50 55 60
Leu Ala Gln His Tyr Asp Lys Ile Gly Gln Pro Ser Ile Ala Leu Glu
65 70 75 80
Tyr Ile Asn Thr Ala Ile Glu Ser Thr Pro Thr Leu Ile Glu Leu Phe
85 90 95
Leu Val Lys Ala Lys Ile Tyr Lys His Ala Gly Asn Ile Lys Glu Ala
100 105 110
Ala Arg Trp Met Asp Glu Ala Gln Ala Leu Asp Thr Ala Asp Arg Phe
115 120 125
Ile Asn Ser Lys Cys Ala Lys Tyr Met Leu Lys Ala Asn Leu Ile Lys
130 135 140
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Val Glu Asn Leu Asn Glu Met Gln Cys Met Trp Phe Gln Thr Glu Cys
165 170 175
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195 200 205
Asp Phe His Thr Tyr Cys Met Arg Lys Ile Thr Leu Arg Ser Tyr Val
210 215 220
Asp Leu Leu Lys Leu Glu Asp Val Leu Arg Gln His Pro Phe Tyr Phe
225 230 235 240

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<212> PRT
<213> Homo sapiens

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Lys Asp Asn Trp Asp Asp Asp Asp Glu Lys Lys Lys Glu Glu Ala Glu
50 55 60
Val Lys Pro Glu Val Lys Ile Ser Glu Lys Lys Lys Ile Ala Glu Lys
65 70 75 80
Ile Lys Glu Lys Glu Arg Gln Gln Lys Lys Arg Gln Glu Glu Ile Lys
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Lys Arg Leu Glu Glu Pro Glu Glu Pro Lys Val Leu Thr Pro Glu Glu
100 105 110
Gln Leu Ala Asp Lys Leu Arg Leu Lys Lys Leu Gln Glu Glu Ser Asp
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130 135 140
Ile Asp Ala Met Asn Pro Ser Ser Arg Asp Asp Phe Thr Glu Phe Gly
145 150 155 160
Lys Leu Leu Lys Asp Lys Ile Thr Gln Tyr Glu Lys Ser Leu Tyr Tyr
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Ala Ser Phe Leu Glu Val Leu Val Arg Asp Val Cys Ile Ser Leu Glu
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Ile Asp Asp Leu Lys Lys Ile Thr Asn Ser Leu Thr Val Leu Cys Ser
195 200 205
Glu Lys Gln Lys Gln Glu Lys Gln Ser Lys Ala Lys Lys Lys Lys Lys
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<210> 15384
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<212> DNA
<213> Homo sapiens

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Ile Arg Pro Lys Ile Ser Leu Lys Phe Asn Thr Lys Asp Glu Met Pro
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405 410 415
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Glu Ser Tyr Tyr Asn His Leu Trp Thr Asn His Pro Leu Gly Gly Ser
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450 455 460
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485 490 495
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515 520 525
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530 535 540
Glu Asp Ile Asp Lys Val Lys Glu Asn Pro Ile Glu Asn Ile Ser Leu
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<211> 1727

<212> DNA

<213> Homo sapiens

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<222> (127).. (1290)

<400> 15386

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 Ser Tyr Leu Ile Asn Thr Thr Val Glu Glu Lys Gly Ile Val Cys Lys
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<213> Homo sapiens

<400> 15389

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385 390 395 400
Gln Tyr Glu Gly His Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val
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<213> Homo sapiens

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003240-69462960

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-9329/13211-

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008270" 69462960

<400> 15395

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<210> 15396

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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09629469.072800

-9333/13211-

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Glu Asp Asn Val Arg Leu Thr Cys Leu Val Ala Glu Leu Gln Lys Gln
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Trp Glu Val Thr Gln Ala Thr Gln Asn Thr Val Lys Glu Leu Gln Thr
180 185 190
Cys Leu Gln Ala Leu Glu Leu Gly Ala Ala Glu Lys Glu Asp Tyr
195 200 205
His Thr Ala Leu Arg Arg Leu Glu Ser Met Leu Gln Pro Leu Ala Gln
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             35             40             45
Ser Pro Asp Tyr Glu Phe Asn Val Trp Thr Arg Pro Asp Cys Ala Glu
             50             55             60
Thr Glu Phe Glu Asn Gly Asn Arg Ser Trp Phe Tyr Phe Ser Val Arg
             65             70             75             80
Gly Gly Met Pro Gly Lys Leu Ile Lys Ile Asn Ile Met Asn Met Asn
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Lys Gln Ser Lys Leu Tyr Ser Gln Gly Met Ala Pro Phe Val Arg Thr

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009270" 69462960


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-9337/13211-

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 Pro Gly Pro Gly Leu Ser Gln Glu Ala Ala Arg Arg Tyr Gly Glu Leu
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 Thr Lys Leu Ile Arg Gln Gln His Glu Met Cys Leu Asn His Ser Asn
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 Gln Phe Thr Gln Leu Gly Asn Ile Thr Glu Thr Thr Lys Phe Glu Lys
 245 250 255
 Leu Ala Glu Asp Cys Lys Arg Ser Met Asp Ile Leu Lys Gln Ala Phe
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 Val Gln Gly Leu Pro Thr Pro Thr Ala Arg Phe Glu Gln Arg Thr Phe
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 Ser Val Ile Lys Ile Phe Pro Asp Leu Ser Ser Asn Asp Met Leu Leu
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 Glu Glu Ala Gln Lys Asp Lys Thr Ser Val Ile Lys Asn Thr Asp Ser
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 <212> DNA
 <213> Homo sapiens

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09629469-072800

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 <222> (172)..(1359)

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009629459.072300


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 <212> PRT
 <213> Homo sapiens

<400> 15405

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			20					25					30		
Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr	Gln	Gln	Lys
			35				40					45			
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			85					90					95		
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Ala	Ala	Leu	Lys	Asp	Glu	Arg	Gln	Gly	Ser	Ile	Pro	Ser	Thr	Gln	Glu
	130				135					140					
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195 200 205
Asn Gln Gly Gly Pro Gly Ser Thr Asn Ser Lys Arg Gln Ala Asn Trp
210 215 220
Ser Leu Glu Glu Glu Lys Ser Arg Leu Leu Ala Glu Ala Ala Leu Glu
225 230 235 240
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260 265 270
Asp Tyr Arg Leu Pro Asp Ser Asp Asp Glu Asp Glu Thr Ala
275 280 285
Ile Gln Arg Val Leu Gln Gln Leu Thr Glu Glu Ala Ala Leu Asp Glu
290 295 300
Ala Ser Gly Phe Asn Ile Pro Ala Glu Gln Ala Ser Arg Pro Trp Thr
305 310 315 320
Gln Pro Arg Gly Ala Glu Pro Glu Ala Gln Asp Val Asp Pro Arg Pro
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340 345 350
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<211> 1843

<212> DNA

<213> Homo sapiens

<400> 15406

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009220 69462960

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 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 15408

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			20					25					30		
Cys	Lys	Gln	Ile	Leu	Ser	Asn	Pro	Lys	Phe	Ala	Glu	His	Gly	Glu	Thr
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Glu	Ala	Gln	Ala	Leu	Asp	Thr	Ala	Asp	Arg	Phe	Ile	Asn	Ser	Lys	Cys		
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Arg	Lys	Ser	Leu	Met	Thr	Ser	Leu	Thr	Phe	Ile	His	Thr	Val				
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<210> 15409

<211> 2085

<212> DNA

008240" 69462960

<213> Homo sapiens

<220>

<221> CDS

<222> (24).. (1166)

<400> 15409

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 Gly Ser Arg Ala Ser Ser Arg Arg Gly Ser Asp Ala Ser Asp Phe Asp
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 Leu Leu Glu Thr Gln Ser Ala Cys Ser Asp Thr Ser Glu Ser Ser Ala
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<210> 15416

<211> 2142

<212> DNA

<213> Homo sapiens

<400> 15416

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Ser Met Lys Glu Thr Asn Arg Arg Lys Ser Leu His Pro Ile His Gln
             35             40             45
Gly Ile Thr Glu Leu Ser Arg Ser Ile Ser Val Asp Leu Ala Glu Ser
             50             55             60
Lys Arg Leu Gly Cys Leu Leu Leu Ser Ser Phe Gln Phe Ser Ile Gln
             65             70             75             80
Lys Leu Glu Pro Phe Leu Arg Asp Thr Lys Gly Phe Ser Leu Glu Ser
             85             90             95
Phe Arg Ala Lys Ala Ser Ser Leu Ser Glu Glu Leu Lys His Phe Ala
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Asp Gly Leu Glu Thr Asp Gly Thr Leu Gln Lys Cys Phe Glu Asp Ser
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Ser Thr Glu Ala Lys	Ile Thr Glu Val Lys Val	Glu Pro Met Thr Tyr		
	180	185		190
Leu Gly Ser Ser Gln	Asn Glu Val Leu Asn Thr	Lys Pro Asp Tyr Gln		
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 <222> (148).. (1896)

<400> 15419

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 <212> PRT
 <213> Homo sapiens

<400> 15420

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His	Ser	Pro	Leu	Asp	Thr	Ser	Lys	Gln	Pro	Leu	Cys	Gln	Leu	Trp	Ala
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Glu	Lys	His	Gly	Ala	Arg	Gly	Thr	His	Glu	Val	Arg	Tyr	Ile	Ser	Ala
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His	Ala	Thr	Ala	Gly	Lys	Cys	Thr	Ser	Thr	Cys	Gln	Arg	Lys	Pro	Leu
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<212> DNA
<213> Homo sapiens

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<222> (40).. (801)

<400> 15421

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009240"69462960

<213> Homo sapiens

<400> 15422

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Thr Ser Ser Glu Asp Arg Ile Leu Val Val Gly Ala Thr Asn Arg Pro
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Gln Glu Ile Asp Glu Ala Ala Arg Arg Arg Leu Val Lys Arg Leu Tyr
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Ala Thr Ile Thr Pro Asp Gln Val Arg Pro Ile Ala Tyr Ile Asp Phe
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<213> Homo sapiens

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<213> Homo sapiens

<400> 15424

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      20             25             30
Ile Ser Gln Asp Asp Phe Phe Lys Pro Glu Ser Glu Ile Glu Thr Asp
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Lys Asn Gly Phe Leu Gln Tyr Asp Val Leu Glu Ala Leu Asn Met Glu
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<213> Homo sapiens

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<400> 15425

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<212> PRT
<213> Homo sapiens

<400> 15426

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Pro	Phe	Leu	Leu	Arg	Ala	Leu	Gln	Ile	Ala	Leu	Val	Val	Ser	Leu	Tyr
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Trp	Val	Thr	Ser	Ile	Ser	Met	Val	Phe	Leu	Asn	Lys	Tyr	Leu	Leu	Asp
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Cys	Cys	Pro	Gly	Ala	Val	Asp	Phe	Pro	Ser	Leu	Arg	Leu	Asp	Leu	Arg
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Val	Ala	Arg	Ser	Val	Leu	Pro	Leu	Ser	Val	Val	Phe	Ile	Gly	Met	Ile
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Thr	Phe	Asn	Asn	Leu	Cys	Leu	Lys	Tyr	Val	Gly	Val	Ala	Phe	Tyr	Asn
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<221> CDS

008210"69462960

<212> PRT

<213> Homo sapiens

<400> 15428

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Thr	Ile	Glu	Glu	Asp	Leu	Met	Lys	Leu	Ile	Ile	Lys	Tyr	Gly	Met	Thr
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Val	Val	Gln	His	Cys	Val	Ser	Cys	Leu	Gly	Ala	Val	Val	Asn	Lys	Val
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Thr	Gln	Asn	Phe	Lys	Phe	Val	Trp	Ala	Cys	Phe	Asn	Arg	Tyr	Tyr	Gly
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Ala	Ile	Ser	Lys	Leu	Lys	Ser	Gln	His	Gln	Glu	Asp	Pro	Asn	Asn	Thr
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Phe	Thr	Lys	His	Ser	Asp	Glu	Glu	Val	Gln	Thr	Lys	Ala	Ile	Ile	Gly
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Val	Lys	Asn	Leu	Tyr	Asn	Asn	Ile	Leu	Ser	Asp	Lys	Asn	Ser	Ser	Val
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Asn	Leu	Lys	Ile	Gln	Val	Leu	Lys	Asn	Leu	Gln	Thr	Tyr	Leu	Gln	Glu
210						215					220				
Glu	Asp	Thr	Arg	Met	Gln	Gln	Ala	Asp	Arg	Asp	Trp	Lys	Lys	Val	Ala
225					230					235					240
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130 135 140
Arg Leu Trp Glu Val Thr Val Thr Asp Arg Lys Thr Leu Ile Glu Pro
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<400> 15439

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<212> PRT

<213> Homo sapiens

<400> 15440

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<211> 2061

<212> DNA

<213> Homo sapiens

<400> 15441

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<210> 15442

<211> 2266

<212> DNA

<213> Homo sapiens

<400> 15442

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<210> 15443
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<210> 15444
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 <212> PRT
 <213> Homo sapiens

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             35             40             45
Gln Leu Leu Ala Glu Val Gly Glu Ala Gly Ser Leu His Arg Glu Gly
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Leu Ser Ser Leu Leu Leu Pro Ala Ser Phe Cys Phe Gly Cys Arg Glu
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Trp Phe Ile His Thr Leu Ile Pro Ser Pro Pro Leu Val Asp Gly Gly
             85             90             95
Leu Ala Phe Ser Ile Pro Val Phe Trp Cys Leu Pro Leu Ser Ala Thr
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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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Ser	Asp	Val	Asp	Ala	Phe	Ile	Ala	Tyr	Val	Gly	Thr	Asp	Gln	Lys	Ser		
	290					295					300						
Cys	Asp	Pro	Gly	Leu	Glu	Asp	Pro	Cys	Gly	Leu	Asn	Arg	Ala	Arg	Met		
305					310					315					320		
Ser	Phe	Cys	Val	Tyr	Ser	Ile	Leu	Gly	Val	Val	Lys	Arg	Thr	Cys	Trp		
				325					330					335			
Pro	Thr	Asp	Leu	Glu	Glu	Ala	Lys	Ala	Gly	Gly	Phe	Val	Val	Gly	Tyr		
			340					345						350			
Thr	Ser	Ser	Gly	Asn	Pro	Ile	Phe	Arg	Asn	Pro	Cys	Thr	Glu	Gln	Ile		
		355					360						365				
Leu	Lys	Leu	Leu	Asp	Asn	Leu	Leu	Ala	Leu	Ile	Arg	Thr	His	Asn	Thr		
	370					375					380						
Leu	Tyr	Ala	Pro	Glu	Met	Leu	Ala	Lys	Met	Ala	Glu	Pro	Phe	Thr	Lys		
385					390					395					400		
Ala	Leu	Asp	Met	Leu	Asp	Ala	Glu	Lys	Ser	Ala	Ile	Leu	Gly	Leu	Pro		
				405					410					415			
Gln	Pro	Leu	Leu	Glu	Leu	Asn	Asp	Ser	Pro	Val	Phe	Lys	Thr	Val	Leu		
			420				425						430				
Glu	Gly	Met	Gln	Arg	Phe	Phe	Ser	Thr	Leu	Tyr	Glu	Asn	Cys	Phe	His		
		435					440					445					
Ile	Pro	Gly	Lys	Ala	Gly	Pro	Ser	Met	Gln	Gln	Asp	Phe	Tyr	Thr	Val		
	450					455					460						
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Asn Ile Pro Asp Tyr Arg Leu Arg Pro Met Leu Arg Val Phe Val Lys						
	485		490		495	
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	500		505		510	
Pro Ile Leu Gly Pro Leu Phe Thr Tyr Leu His Met Arg Leu Ser Gln						
	515		520		525	
Lys Trp Gln Val Ile Asn Gln Arg Ser Leu Leu Cys Gly Glu Asp Glu						
	530		535		540	
Ala Ala Asp Glu Asn Pro Glu Ser Gln Glu Met Leu Glu Glu Gln Leu						
545		550		555		560
Val Arg Met Leu Thr Arg Glu Val Met Asp Leu Ile Thr Val Cys Cys						
	565		570		575	
Val Ser Lys Lys Gly Ala Asp His Ser Ser Ala Pro Pro Ala Asp Gly						
	580		585		590	
Asp Asp Glu Glu Met Met Ala Thr Glu Val Thr Pro Ser Ala Met Ala						
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Pro Arg Ala Glu Val Asp						
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 <213> Homo sapiens

<220>
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 ttgcatggg attattagct gtcctgaggt caaacacagac aaaatccact ataggagtca 240
 tggtaacagc gtcccacaat cctgaggaag acaatggtgt aaaattggtt gatcctttgg 300
 gtgaaatgtt ggcaccatcc tgggaggaac atgccacctg tttagcaaat gctgaggaac 360
 aagatatgca gagagtgtt attgacatca gcgagaaaga agctgtgaat ctgcaacaag 420
 atgcctttgt aattattggt agagatacca ggcccagcag tgagaaactt tcacaatctg 480
 taatagatgg tgtgactgtt ctaggagggtc aattccatga ttatggcttg ttaacaacac 540
 cccagctgca ctacatggtg tattgtcgaa acacgggttg ccatatgga aaggcaacta 600
 tagaagggtt ctaccagaaa ctctctaagg cttttgtgga actcaccaaa caggcttctt 660
 gcagtggaga tgaatacaga tcaacttaagg ttgactgtgc aaatggcata ggggccctga 720
 agctaaggga aatggaacac tacttctcac agggcctgtc agttcagctg tttaatgatg 780
 ggtccaaggg caaactcaat catttatgtg gagctgactt tgtgaaaagt catcagaaac 840
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caatcaatga cctggtgaag aagtacaagc tttctcgagc ttttgtccgg ccctctggtg 1560
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ctactggatt gtctctagat ctgtttttct taaacactaa cagaataatt ctttataaat 1860
aggtgaagcct tacacttggt aaagaaatct acctctaatt tcagtctcac taatgtaaaa 1920
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 <212> PRT
 <213> Homo sapiens

<400> 15454

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			20					25					30		
Glu	His	Leu	Asp	His	Val	Met	Phe	Arg	Met	Gly	Leu	Leu	Ala	Val	Leu
		35				40					45				
Arg	Ser	Lys	Gln	Thr	Lys	Ser	Thr	Ile	Gly	Val	Met	Val	Thr	Ala	Ser
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His	Asn	Pro	Glu	Glu	Asp	Asn	Gly	Val	Lys	Leu	Val	Asp	Pro	Leu	Gly
	65				70				75					80	
Glu	Met	Leu	Ala	Pro	Ser	Trp	Glu	Glu	His	Ala	Thr	Cys	Leu	Ala	Asn
			85						90					95	
Ala	Glu	Glu	Gln	Asp	Met	Gln	Arg	Val	Leu	Ile	Asp	Ile	Ser	Glu	Lys
			100					105					110		
Glu	Ala	Val	Asn	Leu	Gln	Gln	Asp	Ala	Phe	Val	Ile	Ile	Gly	Arg	Asp
		115					120					125			
Thr	Arg	Pro	Ser	Ser	Glu	Lys	Leu	Ser	Gln	Ser	Val	Ile	Asp	Gly	Val
	130					135					140				
Thr	Val	Leu	Gly	Gly	Gln	Phe	His	Asp	Tyr	Gly	Leu	Leu	Thr	Thr	Pro
145					150					155					160
Gln	Leu	His	Tyr	Met	Val	Tyr	Cys	Arg	Asn	Thr	Gly	Gly	Arg	Tyr	Gly

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Lys	Ala	Thr	Ile	Glu	Gly	Tyr	Tyr	Gln	Lys	Leu	Ser	Lys	Ala	Phe	Val		
			180					185						190			
Glu	Leu	Thr	Lys	Gln	Ala	Ser	Cys	Ser	Gly	Asp	Glu	Tyr	Arg	Ser	Leu		
		195					200					205					
Lys	Val	Asp	Cys	Ala	Asn	Gly	Ile	Gly	Ala	Leu	Lys	Leu	Arg	Glu	Met		
	210					215					220						
Glu	His	Tyr	Phe	Ser	Gln	Gly	Leu	Ser	Val	Gln	Leu	Phe	Asn	Asp	Gly		
225					230					235					240		
Ser	Lys	Gly	Lys	Leu	Asn	His	Leu	Cys	Gly	Ala	Asp	Phe	Val	Lys	Ser		
			245						250					255			
His	Gln	Lys	Pro	Pro	Gln	Gly	Met	Glu	Ile	Lys	Ser	Asn	Glu	Arg	Cys		
		260						265					270				
Cys	Ser	Phe	Asp	Gly	Asp	Ala	Asp	Arg	Ile	Val	Tyr	Tyr	Tyr	His	Asp		
		275					280					285					
Ala	Asp	Gly	His	Phe	His	Leu	Ile	Asp	Gly	Asp	Lys	Ile	Ala	Thr	Leu		
	290					295					300						
Ile	Ser	Ser	Phe	Leu	Lys	Glu	Leu	Leu	Val	Glu	Ile	Gly	Glu	Ser	Leu		
305					310					315					320		
Asn	Ile	Gly	Val	Val	Gln	Thr	Ala	Tyr	Ala	Asn	Gly	Ser	Ser	Thr	Arg		
			325						330					335			
Tyr	Leu	Glu	Glu	Val	Met	Lys	Val	Pro	Val	Tyr	Cys	Thr	Lys	Thr	Gly		
		340						345					350				
Val	Lys	His	Leu	His	His	Lys	Ala	Gln	Glu	Phe	Asp	Ile	Gly	Val	Tyr		
		355					360					365					
Phe	Glu	Ala	Asn	Gly	His	Gly	Thr	Ala	Leu	Phe	Ser	Thr	Ala	Val	Glu		
	370					375					380						
Met	Lys	Ile	Lys	Gln	Ser	Ala	Glu	Gln	Leu	Glu	Asp	Lys	Lys	Arg	Lys		
385					390					395					400		
Ala	Ala	Lys	Met	Leu	Glu	Asn	Ile	Ile	Asp	Leu	Phe	Asn	Gln	Ala	Ala		
			405						410					415			
Gly	Asp	Ala	Ile	Ser	Asp	Met	Leu	Val	Ile	Glu	Ala	Ile	Leu	Ala	Leu		
		420						425					430				
Lys	Gly	Leu	Thr	Val	Gln	Gln	Trp	Asp	Ala	Leu	Tyr	Thr	Asp	Leu	Pro		
		435					440					445					
Asn	Arg	Gln	Leu	Lys	Val	Gln	Val	Ala	Asp	Arg	Arg	Val	Ile	Ser	Thr		
	450					455						460					
Thr	Asp	Ala	Glu	Arg	Gln	Ala	Val	Thr	Pro	Pro	Gly	Leu	Gln	Glu	Ala		
465					470					475					480		
Ile	Asn	Asp	Leu	Val	Lys	Lys	Tyr	Lys	Leu	Ser	Arg	Ala	Phe	Val	Arg		
			485						490					495			
Pro	Ser	Gly	Thr	Glu	Asp	Val	Val	Arg	Val	Tyr	Ala	Glu	Ala	Asp	Ser		
		500						505					510				
Gln	Glu	Ser	Ala	Asp	His	Leu	Ala	His	Glu	Val	Ser	Leu	Ala	Val	Phe		
		515					520					525					
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 <212> DNA
 <213> Homo sapiens

<220>
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 cgcgtcatca acaacctcct ctactaccaa accaactacc ttctctgctt cggcatcggc 180
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 gtgcacgcct cgttgccgct gcgcaacctt aagaacaaga ttgagaacaa gatcgagagc 480
 attggtctca agcggacgcc aatgggcctg ctactagagg cactgggaca agagcaggag 540
 gctggatcct aggcccttgg gatctgtacc caggacctgg agaataccac cccacccccca 600
 gcccataatt gggaccacaga gccctttccc agcacttaaa acaggagcct agagccccct 660
 gcccaaacaa aacaggacat ctgtgaccgt cctacccccca cgcagcccc aaactaagat 720
 atccctcaca cccagcccc attacctagg gacaagagtc ttccccagcc ttgaacctag 780
 gaccaagagc cacctacatc cagccccaaa actggggcct caggccagag catccatggc 840
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 <212> PRT
 <213> Homo sapiens

<400> 15456
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 Trp Cys His Arg Val Ile Asn Asn Leu Leu Tyr Tyr Gln Thr Asn Tyr
 35 40 45
 Leu Leu Cys Phe Gly Ile Gly Leu Ala Leu Ala Gly Tyr Val Arg Pro
 50 55 60

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Leu His Thr Leu Leu Ser Ala Leu Val Val Ala Val Ala Leu Gly Val
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Leu Val Trp Ala Ala Glu Thr Arg Ala Ala Val Arg Arg Cys Arg Arg
85 90 95
Ser His Pro Ala Ala Cys Leu Ala Ala Val Leu Ala Val Gly Leu Leu
100 105 110
Met Leu Trp Val Ala Gly Gly Ala Cys Thr Phe Leu Phe Ser Ile Ala
115 120 125
Gly Pro Val Leu Leu Ile Leu Val His Ala Ser Leu Arg Leu Arg Asn
130 135 140
Leu Lys Asn Lys Ile Glu Asn Lys Ile Glu Ser Ile Gly Leu Lys Arg
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Gly Ser

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<212> DNA
<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 Ser Thr Ala Leu Leu Tyr Ser Lys Arg Leu Ile Thr Phe Gln Leu Arg
 35 40 45
 His Ile Leu Lys Ala Arg Cys Asp Pro Ala Pro Ala Ala Asn Gly Ala
 50 55 60
 Ile Arg Phe His Cys Asp Pro Thr Phe Trp Ala Lys Asn Val Val Asn
 65 70 75 80
 Leu Gly Asn Leu Val Ile Glu Ser Lys Pro Ala Pro Gly Tyr Thr Pro
 85 90 95
 Asn Val Val Val Gly Gln Val Pro Pro Gly Thr Asn His Ile Ser Lys
 100 105 110

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Thr	Pro	Gly	Gln	Ile	Asn	Leu	Ala	Gln	Leu	Arg	Leu	Gln	His	Met	Gln
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		130				135						140			
Gln	Gln	Pro	Pro	Ala	Pro	Val	Pro	Thr	Thr	Thr	Thr	Thr	Thr	Gln	Gln
145					150					155					160
His	Pro	Arg	Gln	Ala	Ala	Pro	Gln	Met	Leu	Gln	Gln	Gln	Pro	Pro	Arg
				165					170					175	
Leu	Ile	Ser	Val	Gln	Thr	Met	Gln	Arg	Gly	Asn	Met	Asn	Cys	Gly	Ala
			180					185					190		
Phe	Gln	Ala	His	Gln	Met	Arg	Leu	Ala	Gln	Asn	Ala	Ala	Arg	Ile	Pro
		195					200					205			
Gly	Ile	Pro	Arg	His	Ser	Gly	Pro	Gln	Tyr	Ser	Met	Met	Gln	Pro	His
		210				215					220				
Leu	Gln	Arg	Gln	His	Ser	Asn	Pro	Gly	His	Ala	Gly	Pro	Phe	Pro	Val
225					230					235					240
Val	Ser	Val	His	Asn	Thr	Thr	Ile	Asn	Pro	Thr	Ser	Pro	Thr	Thr	Ala
				245					250					255	
Thr	Met	Ala	Asn	Ala	Asn	Arg	Gly	Pro	Thr	Ser	Pro	Ser	Val	Thr	Ala
			260				265						270		
Ile	Glu	Leu	Ile	Pro	Ser	Val	Thr	Asn	Pro	Glu	Asn	Leu	Pro	Ser	Leu
		275					280					285			
Pro	Asp	Ile	Pro	Pro	Ile	Gln	Ala	Asn	Val	Val	Pro	Met	Met	His	Ser
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Trp	Tyr	Glu	Phe	Gly	Ala	Arg	Glu	Lys	Thr	Gln	Asp	Gln	Asn	Val	Leu
305					310					315					320
Glu	Asp	Ala	Gly	Ser	Ser	Ser	Leu	Asp	Asn	Leu	Leu	Ser	Arg	Tyr	Ile
				325					330					335	
Ser	Gly	Ser	His	Leu	Pro	Pro	Gln	Pro	Thr	Ser	Thr	Met	Asn	Pro	Ser
			340					345					350		
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His	Thr	Pro	Val	Arg	Pro	Pro	Ser	Thr	Ser	Ser	Thr	Gly	Ser	Arg	Gly
	370					375						380			
Ser	Cys	Gly	Ser	Ser	Gly	Arg	Thr	Ala	Glu	Lys	Thr	Ser	Leu	Ser	Phe
385					390					395					400
Lys	Ser	Asp	Gln	Val	Lys	Val	Lys	Gln	Glu	Pro	Gly	Thr	Glu	Asp	Glu
				405					410					415	
Ile	Cys	Ser	Phe	Ser	Gly	Gly	Val	Lys	Gln	Glu	Lys	Thr	Glu	Asp	Gly
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Thr	Ser	Lys	Leu	Leu	Ser	Asp	Pro	Asn	Tyr	Gly	Val	His	Leu	Pro	Ala
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Gln	Cys	Gly	Tyr	Asn	Pro	Asn	Tyr	Phe	His	Glu	Ile	Leu	Lys	Thr	Ile
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225					230					235					240
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<213> Homo sapiens

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Glu	Asp	Phe	Tyr	Gln	Gly	Ser	Met	Glu	Cys	Ala	Asp	Glu	Pro	Cys	Asp
		35					40					45			
Ala	Tyr	Glu	Val	Glu	Gln	Thr	Pro	Gln	Gly	Phe	Arg	Ser	Thr	Leu	Arg
		50				55					60				
Ala	Pro	Ser	Leu	Leu	Tyr	Lys	His	Ile	Val	Gly	Lys	Arg	Gly	Asp	Thr
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Arg	Lys	Lys	Ile	Glu	Met	Glu	Thr	Lys	Thr	Ser	Ile	Ser	Ile	Pro	Lys
			85					90						95	
Pro	Gly	Gln	Asp	Gly	Glu	Ile	Val	Ile	Thr	Gly	Gln	His	Arg	Asn	Gly
			100					105						110	
Val	Ile	Ser	Ala	Arg	Thr	Arg	Ile	Asp	Val	Leu	Leu	Asp	Thr	Phe	Arg
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Phe	Glu	Asn	Phe	Tyr	Phe	Gly	Ser	Leu	Lys	Leu	Asn	Ser	Ile	His	Ile
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 35 40 45
 Lys Ala Lys Pro Arg Ile Leu Phe Leu Phe Asn Asp Ile Leu Val Tyr
 50 55 60
 Gly Ser Ile Val Leu Asn Lys Arg Lys Tyr Arg Ser Gln His Ile Ile
 65 70 75 80
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 Lys Asn Arg Trp Met Ile Lys Thr Ala Lys Lys Ser Phe Val Val Ser
 100 105 110
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 115 120 125
 Cys Val Arg Arg Gln Leu Arg Ala Thr Gly Arg Pro Pro Ser Thr Glu
 130 135 140
 His Ala Ala Pro Trp Ile Pro Asp Lys Ala Thr Asp Ile Cys Met Arg
 145 150 155 160
 Cys Thr Gln Thr Arg Phe Ser Ala Leu Thr Arg Arg His His Cys Arg
 165 170 175
 Lys Cys Gly Phe Val Val Cys Ala Glu Cys Ser Arg Gln Arg Phe Leu
 180 185 190
 Leu Pro Arg Leu Ser Pro Lys Pro Val Arg Val Cys Ser Leu Cys Tyr
 195 200 205
 Arg Glu Leu Ala Ala Gln Gln Arg Gln Glu Glu Ala Glu Glu Gln Gly

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 <212> DNA
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 50 55 60
 Gln Thr Ala Ala Leu Gln Gln Gln Ala Ala Ala Ala Ala Ala Leu
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 115 120 125
 Thr Val Ser Tyr Pro Thr Pro Arg Ser Ser Gln Gln Gln Thr Gln Pro
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 165 170 175
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 180 185 190
 Asn Pro Asn Met Pro Phe Lys Trp Asn Ala Gln Arg Ile Gln Thr Leu
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 210 215 220
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 225 230 235 240
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Lys	Arg	Ser	Arg	Glu	Arg	Ser	Pro	Arg	Arg	Glu	Arg	Glu	Arg	Ser	Pro				
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Phe	Ala	Glu	Ile	Arg	Tyr	His	Arg	Pro	Glu	Glu	Thr	His	Lys	Gly	Arg				
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Tyr	Lys	Gln	Gln	Leu	Val	Glu	Lys	Leu	Gln	Gly	Glu	Arg	Lys	Glu	Ala				
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 <213> Homo sapiens

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Arg	Asn	Pro	Pro	Pro	Arg	Thr	Leu	His	Pro	Ile	Ser	Thr	Ser	His	Ser	210	215	220	
Cys	Ala	Glu	Thr	Pro	Arg	Ser	Val	Glu	Glu	Ile	Leu	Arg	Gly	Ala	Arg	225	230	235	240
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Asn Gln Thr Thr Thr Thr Thr Lys Asn Leu Gly Gln Ala Gln Trp Leu
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Thr Pro Val Ile Pro Ala Phe Trp Glu Ile Gln Ala Gly Gly Ser Phe
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Glu Leu Gly Ser Leu Arg Ser Ala Trp Val Met Trp Arg Asn Leu Ile
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<213> Homo sapiens

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<400> 15483

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-9420/13211-

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<211> 1928

<212> DNA

<213> Homo sapiens

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 35 40 45

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 Arg Leu Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr
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 Gly Pro Thr Ser Asp Thr Gly Trp Gly Cys Met Leu Arg Cys Gly Gln
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195 200 205
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<213> Homo sapiens

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<221> CDS

<222> (101).. (1357)

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<400> 15489

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<211> 419

<212> PRT

<213> Homo sapiens

<400> 15490

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<211> 2132
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<213> Homo sapiens

<400> 15491

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<213> Homo sapiens

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<400> 15492

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<213> Homo sapiens

<400> 15493

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<212> DNA

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Lys	Ser	Phe	Ser	Gln	Ile	Ser	Asp	Leu	Ile	Arg	His	Gln	Arg	Ile	His
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<220>

<221> CDS

<222> (864).. (1607)

<400> 15503

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<211> 248

<212> PRT

<213> Homo sapiens

<400> 15504

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<211> 1885

<212> DNA

<213> Homo sapiens

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<220>
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<222> (300).. (1031)

<400> 15505

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<213> Homo sapiens

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<212> DNA
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 50 55 60
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<211> 113

<212> PRT

<213> Homo sapiens

<400> 15517

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          20             25             30

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09629469 " 072800

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65 70 75 80
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<212> DNA
<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 15519

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			20					25					30		
Ser	Ala	Asp	Thr	His	Ala	Ser	Ser	Met	Ile	Gln	Phe	Ser	Ser	Ser	Leu
			35				40					45			
Asn	Gln	Gly	Arg	Asp	Arg	Gln	Thr	Ser	His	His	Phe	Phe	Cys	Ser	Cys
			50			55					60				
Asn	Ser	Pro	Leu	Cys	Ser	Leu	Gly	Phe	Pro	Gly	Asp	Val	Ser	Ile	Lys
					70				75					80	
Ile	Glu	Arg	Cys	His	His	His	Cys	Arg	His	Cys	His	Cys	Cys	Thr	Ile
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (490).. (2295)

<400> 15520

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<211> 602

<212> PRT

<213> Homo sapiens

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<400> 15521

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			20					25					30		
Gly	Asn	Gln	Leu	Ala	Lys	Phe	Arg	Gln	Cys	Leu	Gln	Glu	Asn	Pro	Lys
		35					40					45			
Phe	Leu	Gln	Glu	Lys	Val	Lys	Gln	Tyr	Phe	Lys	Asn	Asn	Gln	His	Lys
	50					55					60				
Leu	Thr	Leu	Ser	Met	Arg	Pro	Asp	Asp	Lys	Tyr	His	Glu	Lys	Gln	Ala
	65				70					75					80
Gln	Val	Glu	Ala	Thr	Lys	Leu	Lys	Gln	Lys	Val	Glu	Ala	Leu	Ser	Pro
				85					90					95	
Gly	Asp	Arg	Gln	Gln	Ile	Tyr	Glu	Lys	Gly	Leu	Glu	Leu	Arg	Ser	Gln
			100					105					110		
Gln	Ser	Lys	Pro	Gln	Asp	Ala	Ser	Cys	Leu	Pro	Ala	Leu	Lys	Val	Ser
		115					120					125			
Asp	Ile	Glu	Pro	Thr	Ile	Pro	Val	Thr	Glu	Leu	Asp	Val	Val	Leu	Thr
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Ala	Gly	Asp	Ile	Pro	Val	Gln	Tyr	Cys	Ala	Gln	Pro	Thr	Asn	Gly	Met
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Val	Tyr	Phe	Arg	Ala	Phe	Ser	Ser	Leu	Asn	Thr	Leu	Pro	Glu	Glu	Leu
			165						170					175	
Arg	Pro	Tyr	Val	Pro	Leu	Phe	Cys	Ser	Val	Leu	Thr	Lys	Leu	Gly	Cys
			180				185						190		
Gly	Leu	Leu	Asp	Tyr	Arg	Glu	Gln	Ala	Gln	Gln	Ile	Glu	Leu	Lys	Thr
		195				200						205			
Gly	Gly	Met	Ser	Ala	Ser	Pro	His	Val	Leu	Pro	Asp	Asp	Ser	His	Met
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Asp	Thr	Tyr	Glu	Gln	Gly	Val	Leu	Phe	Ser	Ser	Leu	Cys	Leu	Asp	Arg
	225				230					235					240
Asn	Leu	Pro	Asp	Met	Met	Gln	Leu	Trp	Ser	Glu	Ile	Phe	Asn	Asn	Pro
			245						250					255	
Cys	Phe	Glu	Glu	Glu	Glu	His	Phe	Lys	Val	Leu	Val	Lys	Met	Thr	Ala
		260					265						270		
Gln	Glu	Leu	Ala	Asn	Gly	Ile	Pro	Asp	Ser	Gly	His	Leu	Tyr	Ala	Ser
		275					280					285			
Ile	Arg	Ala	Gly	Arg	Thr	Leu	Thr	Pro	Ala	Gly	Asp	Leu	Gln	Glu	Thr
	290					295					300				
Phe	Ser	Gly	Met	Asp	Gln	Val	Arg	Leu	Met	Lys	Arg	Ile	Ala	Glu	Met
	305				310					315					320
Thr	Asp	Ile	Lys	Pro	Ile	Leu	Arg	Lys	Leu	Pro	Arg	Ile	Lys	Lys	His
			325						330					335	
Leu	Leu	Asn	Gly	Asp	Asn	Met	Arg	Cys	Ser	Val	Asn	Ala	Thr	Pro	Gln
		340						345					350		
Gln	Met	Pro	Gln	Thr	Glu	Lys	Ala	Val	Glu	Asp	Phe	Leu	Arg	Ser	Ile
		355					360					365			
Gly	Arg	Ser	Lys	Lys	Glu	Arg	Arg	Pro	Val	Arg	Pro	His	Thr	Val	Glu

0092270 69462960

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385		390		395
Ser Gln Val Ile Arg Lys Leu Val Met Glu Pro Thr Phe Lys Pro Trp				
	405		410	415
Gln Met Lys Thr His Phe Leu Met Pro Phe Pro Val Asn Tyr Val Gly				
	420		425	430
Glu Cys Ile Arg Thr Val Pro Tyr Thr Asp Pro Asp His Ala Ser Leu				
	435		440	445
Lys Ile Leu Ala Arg Leu Met Thr Ala Lys Phe Leu His Thr Glu Ile				
	450		455	460
Arg Glu Lys Gly Gly Ala Tyr Gly Gly Gly Ala Lys Leu Ser His Asn				
465		470		475
Gly Ile Phe Thr Leu Tyr Ser Tyr Arg Asp Pro Asn Thr Ile Glu Thr				
	485		490	495
Leu Gln Ser Phe Gly Lys Ala Val Asp Trp Ala Lys Ser Gly Lys Phe				
	500		505	510
Thr Gln Gln Asp Ile Asp Glu Ala Lys Leu Ser Val Phe Ser Thr Val				
	515		520	525
Asp Ala Pro Val Ala Pro Ser Asp Lys Gly Met Asp His Phe Leu Tyr				
	530		535	540
Gly Leu Ser Asp Glu Met Lys Gln Ala His Arg Glu Gln Leu Phe Ala				
545		550		555
Val Ser His Asp Lys Leu Leu Ala Val Ser Asp Arg Tyr Leu Gly Thr				
	565		570	575
Gly Lys Ser Thr His Gly Leu Ala Ile Leu Gly Pro Glu Asn Pro Lys				
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<211> 608
<212> PRT
<213> Homo sapiens

<400> 15523

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Thr	Glu	Glu	Val	Glu	Ala	Ile	Leu	Asn	Gly	Asp	Val	Glu	Thr	Leu	Gln	20	25	30	
Ser	Gly	Asp	His	Gly	Arg	Pro	Asn	Leu	Ser	Arg	Leu	Lys	Leu	Ala	Ile	35	40	45	
Lys	Tyr	Glu	Val	Lys	Lys	Phe	Val	Ala	His	Pro	Asn	Cys	Gln	Gln	Gln	50	55	60	
Leu	Leu	Ser	Ile	Trp	Tyr	Glu	Leu	Ser	Gly	Leu	Arg	Gln	Gln	Thr	Met	65	70	75	80
Ala	Val	Lys	Phe	Leu	Val	Val	Leu	Ala	Val	Ala	Ile	Gly	Leu	Pro	Phe	85	90	95	
Leu	Ala	Leu	Ile	Tyr	Trp	Phe	Ala	Pro	Cys	Ser	Lys	Met	Gly	Lys	Ile	100	105	110	
Met	Arg	Gly	Pro	Phe	Met	Lys	Phe	Val	Ala	His	Ala	Ala	Ser	Phe	Thr	115	120	125	
Ile	Phe	Leu	Gly	Leu	Leu	Val	Met	Asn	Ala	Ala	Asp	Arg	Phe	Glu	Gly	130	135	140	
Thr	Lys	Leu	Leu	Pro	Asn	Glu	Thr	Ser	Thr	Asp	Asn	Ala	Lys	Gln	Leu	145	150	155	160
Phe	Arg	Met	Lys	Thr	Ser	Cys	Phe	Ser	Trp	Met	Glu	Met	Leu	Ile	Ile	165	170	175	
Ser	Trp	Val	Ile	Gly	Met	Ile	Trp	Ala	Glu	Cys	Lys	Glu	Ile	Trp	Thr	180	185	190	
Gln	Gly	Pro	Lys	Glu	Tyr	Leu	Phe	Glu	Leu	Trp	Asn	Met	Leu	Asp	Phe	195	200	205	
Gly	Met	Leu	Ala	Ile	Phe	Ala	Ala	Ser	Phe	Ile	Ala	Arg	Phe	Met	Ala	210	215	220	
Phe	Trp	His	Ala	Ser	Lys	Ala	Gln	Ser	Ile	Ile	Asp	Ala	Asn	Asp	Thr	225	230	235	240
Leu	Lys	Asp	Leu	Thr	Lys	Val	Thr	Leu	Gly	Asp	Asn	Val	Lys	Tyr	Tyr	245	250	255	
Asn	Leu	Ala	Arg	Ile	Lys	Trp	Asp	Pro	Ser	Asp	Pro	Gln	Ile	Ile	Ser	260	265	270	
Glu	Gly	Leu	Tyr	Ala	Ile	Ala	Val	Val	Leu	Ser	Phe	Ser	Arg	Ile	Ala	275	280	285	
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Val	Phe	Val	Ala	Phe	Met	Ile	Gly	Met	Phe	Asn	Leu	Tyr	Ser	Tyr	Tyr	325	330	335	
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003220" 59462960

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<212> PRT

<213> Homo sapiens

<400> 15526

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Lys Lys Val Asp Leu Thr His Leu Glu Gly Glu Val Glu Lys Arg Lys
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Gly Thr Gln Val Leu Asp Gly Thr Ser Gly Phe Ser Pro Ala Pro Lys
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Leu Val Glu Ser Pro Lys Glu Gly Lys Gly Ser Lys Pro Ser Pro Leu
115 120 125
Ser Val Lys Asn Thr Lys Arg Arg Leu Glu Gly Ala Lys Lys Ala Lys
130 135 140
Ala Asp Ser Pro Val Asn Gly Leu Pro Lys Gly Arg Glu Ser Arg Ser
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Arg Ser Arg Ser Arg Glu Gln Ser Tyr Ser Arg Ser Pro Ser Arg Ser
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Ala Ser Pro Lys Arg Arg Lys Ser Asp Ser Gly Ser Thr Ser Gly Gly
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Gln Ala Pro Arg Ser Ala Pro Tyr Lys Gly Ser Glu Ile Arg Gly Ser
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Arg Lys Ser Lys Asp Cys Lys Tyr Pro Gln Lys Pro His Lys Ser Arg
225 230 235 240
Ser Arg Ser Ser Ser Arg Ser Arg Ser Arg Ser Arg Glu Arg Ala Asp
245 250 255
Asn Pro Gly Lys Tyr Lys Lys Lys Ser His Tyr Tyr Arg Asp Gln Arg
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<211> 2042

<212> DNA

<213> Homo sapiens

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<212> DNA

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<212> PRT

<213> Hom

<400> 15530

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Tyr Leu Leu Phe Ile Ser Thr Trp Asn Ile Arg Gln Asp Arg Leu His
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 <212> PRT
 <213> Homo sapiens

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			20					25					30		
Ala	Ile	Leu	Lys	Ser	Arg	Lys	Pro	Ser	Arg	Trp	Leu	Gln	Thr	Phe	Leu
		35				40						45			
Ser	Ser	Ser	Gln	Tyr	Val	Thr	Cys	Val	Glu	Thr	Tyr	Leu	Glu	Asp	Glu
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Gly	Gln	Leu	Asp	Leu	Val	Val	Lys	Tyr	Leu	Gln	Gly	Val	Tyr	Gln	Glu
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Val	Gly	Ala	Lys	Val	Leu	Gln	Arg	Thr	Asn	Gly	Asp	Arg	Ile	Arg	Phe
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Pro	Ser	Leu	Ser	Tyr	Arg	Glu	Lys	Glu	Ile	Phe	Asp	Asn	Gln	Leu	Leu
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<211> 1292
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<213> Homo sapiens

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<400> 15540

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<212> PRT
<213> Homo sapiens

<400> 15541

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          20           25           30
Ser Ser Val Thr Ala Gln Pro Ala Gln Thr Ser Tyr Leu Ser Thr Gly
          35           40           45
Gln Asp Thr Val Ser Asn Pro Thr Tyr Met Asn Gln Asn Ser Asn Leu
          50           55           60
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Ala	Gly	Phe	Pro	Val	Thr	Val	Pro	Ala	His	Pro	Val	Ala	Gln	Gln	His
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Thr	Asn	Tyr	His	Gln	Gln	Pro	Leu	Leu							
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<210> 15542
<211> 2291
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1729).. (2169)

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<211> 147
<212> PRT
<213> Homo sapiens

<400> 15543
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35 40 45
Phe His His Asn Leu Arg Gly Leu Asn Leu Pro Tyr Pro Thr Pro His
50 55 60
Pro His Pro Ser His Gly Arg Pro Gln Glu Leu Asp Pro Gly Leu Cys
65 70 75 80
Arg Met Pro Ser Pro Tyr Thr Pro Leu Lys Arg Gln Ser Leu Ala Gly
85 90 95
His Gly Gly Ser Cys Leu Gln Ser Gln His Leu Gly Arg Leu Arg Gln
100 105 110
Ala Asp Asp Leu Arg Pro Gly Val Arg Asp Gln Pro Gly Gln Tyr Gly
115 120 125
Glu Thr Ser Phe Leu Leu Lys Ile Gln Lys Leu Ala Arg Arg Gly Gly
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Leu Cys Leu
145

<210> 15544
<211> 2210
<212> DNA
<213> Homo sapiens

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<210> 15545
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 <212> DNA
 <213> Homo sapiens

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 <222> (209).. (1075)

<400> 15545
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<210> 15546
 <211> 289
 <212> PRT
 <213> Homo sapiens

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<400> 15546
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          35             40            45
Ser Pro Thr Gly Gly Ala Pro His Gly Tyr Cys Ser Pro Thr Ser Ala
          50             55            60
Ser Tyr Gly Lys Ala Leu Asn Pro Tyr Gln Tyr Gln Tyr His Gly Val
          65             70            75            80
Asn Gly Ser Ala Gly Ser Tyr Pro Ala Lys Ala Tyr Ala Asp Tyr Ser
          85             90            95
Tyr Ala Ser Ser Tyr His Gln Tyr Gly Gly Ala Tyr Asn Arg Val Pro
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Ser Ala Thr Asn Gln Pro Glu Lys Glu Val Thr Glu Pro Glu Val Arg
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Met Val Asn Gly Lys Pro Lys Lys Val Arg Lys Pro Arg Thr Ile Tyr

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	165	170	175	
Thr Gln Thr Gln Val Lys	Ile Trp Phe Gln Asn	Lys Arg Ser Lys Ile		
	180	185	190	
Lys Lys Ile Met Lys Asn	Gly Glu Met Pro Pro	Glu His Ser Pro Ser		
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Ser Ser Asp Pro Met Ala	Cys Asn Ser Pro Gln	Ser Pro Ala Val Trp		
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Glu Pro Gln Gly Ser Ser	Arg Ser Leu Ser His	His Pro His Ala His		
225	230	235	240	
Pro Pro Thr Ser Asn Gln	Ser Pro Ala Ser Ser	Tyr Leu Glu Asn Ser		
	245	250	255	
Ala Ser Trp Tyr Thr Ser	Ala Ala Ser Ser Ile	Asn Ser His Leu Pro		
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<210> 15547
 <211> 1881
 <212> DNA
 <213> Homo sapiens

<400> 15547

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<210> 15548
 <211> 1731
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (36).. (1223)

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caattattcg gataaatgtg ggaggaaaaac tcttaacca tcatctaaag gagatcatat 600
cttacaggca gctacatgtt atggatgaaa cacatgtgat taatcaagt aaagaagatg 660
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<210> 15549
 <211> 396
 <212> PRT
 <213> Homo sapiens

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			20					25					30		
Lys	Thr	Ala	Arg	Leu	Lys	Thr	Phe	Thr	Ala	Asn	Gln	Ile	Asp	Glu	Ile
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65				70					75					80	
Lys	Glu	Met	Tyr	Gln	Val	Asp	Phe	Leu	Asp	Thr	Asn	Ile	Ile	Ile	Thr
			85					90				95			
Glu	Pro	Tyr	Phe	Asn	Phe	Thr	Ser	Ile	Gln	Glu	Ser	Met	Asn	Glu	Ile
			100					105				110			
Leu	Phe	Glu	Glu	Tyr	Gln	Phe	Gln	Ala	Val	Leu	Arg	Val	Asn	Ala	Gly
		115					120					125			
Ala	Leu	Ser	Ala	His	Arg	Tyr	Phe	Arg	Asp	Asn	Pro	Ser	Glu	Leu	Cys
	130					135					140				
Cys	Ile	Ile	Val	Asp	Ser	Gly	Tyr	Ser	Phe	Thr	His	Ile	Val	Pro	Tyr
145				150						155				160	
Cys	Arg	Ser	Lys	Lys	Lys	Lys	Glu	Ala	Ile	Ile	Arg	Ile	Asn	Val	Gly
			165						170				175		
Gly	Lys	Leu	Leu	Thr	Asn	His	Leu	Lys	Glu	Ile	Ile	Ser	Tyr	Arg	Gln
			180					185					190		
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		195					200					205			
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	210					215					220				
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Phe	Ser	Thr	Ile	Lys	Lys	Gly	Phe	Cys	Lys	Pro	Arg	Glu	Glu	Met	Val
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Leu	Ser	Gly	Lys	Tyr	Lys	Ser	Gly	Glu	Gln	Ile	Leu	Arg	Leu	Ala	Asn
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Glu Arg Phe Ala Val Pro Glu Ile Leu Phe Asn Pro Ser Asp Ile Gly
 275 280 285
 Ile Gln Glu Met Gly Ile Pro Glu Ala Ile Val Tyr Ser Ile Gln Asn
 290 295 300
 Leu Pro Glu Glu Met Gln Pro His Phe Phe Lys Asn Ile Val Leu Thr
 305 310 315 320
 Gly Gly Asn Ser Leu Phe Pro Gly Phe Arg Asp Arg Val Tyr Ser Glu
 325 330 335
 Val Arg Cys Leu Thr Pro Thr Asp Tyr Asp Val Ser Val Val Leu Pro
 340 345 350
 Glu Asn Pro Ile Thr Tyr Ala Trp Glu Gly Gly Lys Leu Ile Ser Glu
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 Asn Gly His Ser Val Cys Glu Glu Lys Phe Asp Ile
 385 390 395

<210> 15550
 <211> 1518
 <212> DNA
 <213> Homo sapiens

<400> 15550
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 atatttaagc acttcctctg aaacctcat aactaacaaa atatgaaaaa acaataaatg 300
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 tactcattaa tattttaatt ggaactttgc atcatctcag gtagaacgtg agtctcctgt 420
 cactatattt aaacaagaat gtccataaaag attgtctatt ttctgaaaat agcctctgct 480
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<210> 15551

<211> 1088

<212> DNA

<213> Homo sapiens

<400> 15551

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<210> 15552

<211> 1753

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (35).. (1096)

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<210> 15553
 <211> 354
 <212> PRT
 <213> Homo sapiens

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<400> 15553
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Asp His Asp Arg Arg Val Arg Glu Ala Thr Gln Gln Ala Phe Glu Lys
          35             40             45
Leu Ile Leu Lys Val Lys Lys Gln Leu Ala Pro Tyr Leu Lys Ser Leu
          50             55             60
Met Gly Asp Trp Leu Met Ala Gln Cys Asp Thr Tyr Thr Pro Ala Ala
          65             70             75             80
Phe Ala Ala Lys Asp Ala Phe Glu Ala Ala Phe Pro Pro Ser Lys Gln
          85             90             95
Pro Glu Ala Ile Ala Phe Cys Lys Asp Glu Ile Thr Ser Val Leu Gln
          100            105            110
Asp His Leu Ile Lys Glu Thr Pro Asp Thr Leu Ser Asp Pro Gln Thr
          115            120            125
Val Pro Glu Glu Glu Arg Glu Ala Lys Phe Tyr Arg Val Val Thr Cys

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008270 69462960

130		135		140
Ser Leu Leu Ala Leu Lys Arg Leu Leu Cys Leu Leu Pro Asp Asn Glu				
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Leu Asp Ser Leu Glu Glu Lys Phe Lys Ser Leu Leu Ser Gln Asn Lys				
	165		170	175
Phe Trp Lys Tyr Gly Lys His Ser Val Pro Gln Ile Arg Ser Ala Tyr				
	180		185	190
Phe Glu Leu Val Ser Ala Leu Cys Gln Arg Ile Pro Gln Leu Met Lys				
	195		200	205
Glu Glu Ala Ser Lys Val Ser Pro Ser Val Leu Leu Ser Ile Asp Asp				
	210		215	220
Ser Asp Pro Ile Val Cys Pro Ala Leu Trp Glu Ala Val Leu Tyr Thr				
225		230		235
Leu Thr Thr Ile Glu Asp Cys Trp Leu His Val Asn Ala Lys Lys Ser				
	245		250	255
Val Phe Pro Lys Leu Ser Thr Val Ile Arg Glu Gly Gly Arg Gly Leu				
	260		265	270
Ala Thr Val Ile Tyr Pro Tyr Leu Leu Pro Phe Ile Ser Lys Leu Pro				
	275		280	285
His Ser Ile Thr Asn Pro Lys Leu Asp Phe Phe Lys Asn Phe Leu Thr				
	290		295	300
Ser Leu Val Ala Gly Leu Ser Thr Glu Arg Thr Lys Thr Ser Ser Ser				
305		310		315
Glu Ser Ser Ala Val Ile Ser Ala Phe Phe Glu Cys Leu Arg Phe Ile				
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<210> 15554
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (277).. (1680)

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09629469.072800

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<210> 15555

<211> 468

<212> PRT

<213> Homo sapiens

<400> 15555

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          20             25             30

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09629459.072800

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50								55								
Thr	Ala	Glu	Glu	Phe	Leu	Gln	Gln	Met	Asn	Tyr	Ser	Lys	Asn	Thr	Gln	
65			70						75							
Ile	Gln	Val	Leu	Pro	Glu	Gly	Gly	Glu	Thr	Pro	Ile	Phe	Lys	Gln	Phe	
		85						90								
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Trp	Gln	Gly	Ala	Asn	Ala	Thr	Arg	Asp	Glu	Leu	Thr	Thr	Ser	Ala	Phe	
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Gln	Thr	Ser	Pro	Leu	Leu	Glu	Thr	Gln	Ala	Glu	Asp	His	Pro	Pro	Arg	
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Pro	Gly	Glu	Phe	Thr	Gln	Asp	Asp	Leu	Ala	Glu	Asp	Asp	Val	Met	Leu	
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 Thr Asp Pro Ser Gly Arg Asp Lys Arg Thr Pro Ile Val Ile Ile Lys
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 <212> DNA
 <213> Homo sapiens

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<213> Homo sapiens

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<221> CDS
<222> (256).. (807)

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<400> 15559

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<222> (37).. (1017)

<400> 15561

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<212> PRT
<213> Homo sapiens

<400> 15562

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His Leu Phe Val Ala Cys Leu Ser Leu Gly Phe Phe Ser Leu Leu Trp
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Pro His Met Arg Arg Phe Leu Ser Arg Lys Lys Ile Arg His His Ile
115 120 125
Tyr Val Leu Asn Gln Val Asp His Phe Arg Phe Asn Arg Ala Ala Leu
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Met His Asp Val Asp Leu Leu Pro Leu Asn Glu Glu Leu Asp Tyr Gly
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Phe Pro Glu Ala Gly Pro Phe His Val Ala Ser Pro Glu Leu His Pro
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Thr Val Lys Tyr His Val Ala Ser Arg Thr Ala Leu Ser Val Gly Gly
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<211> 1794

<212> DNA

<213> Homo sapiens

<400> 15563

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<400> 15570

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195

200

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<212> DNA
<213> Homo sapiens

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<222> (118)..(1326)

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 <212> PRT
 <213> Homo sapiens

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			35				40					45			
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Lys	Ile	Asp	Ala	Leu	Ser	Cys	Leu	Tyr	Val	Ile	Leu	Cys	Asn	His	Ser
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 <212> PRT
 <213> Homo sapiens

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Gly Ala Leu Glu Lys Asn Gly Thr Gln Leu Met Ile Arg Ser Tyr Glu
             35             40             45
Leu Gly Val Leu Phe Leu Pro Ser Ala Phe Gly Leu Asp Ser Phe Lys
             50             55             60
Val Lys Gln Lys Phe Phe Ala Gly Ser Gln Glu Pro Met Ala Thr Phe
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Pro Val Pro Tyr Asp Leu Pro Pro Glu Leu Tyr Gly Ser Lys Asp Arg
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 <213> Homo sapiens

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 <211> 358
 <212> PRT
 <213> Homo sapiens

<400> 15576
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 <211> 2216
 <212> DNA

<213> Homo sapiens

<400> 15577

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<400> 15578

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1934

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (165).. (545)

<400> 15611

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-9546/13211-

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<211> 127

<212> PRT

<213> Homo sapiens

<400> 15612

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Glu Phe Phe Val Tyr Phe Gly Tyr Met Ser Ser Ile Arg Tyr Met Leu
35 40 45
Cys Ser Ile Phe Ser Gln Cys Val Ala Cys Leu Phe Ile Leu Leu Thr
50 55 60
Met Ser Phe Ala Glu Gln Lys Phe Leu Ile Leu Met Met Ser Ser Leu
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Ser Val Phe Ser Phe Met Ser His Ala Phe Gly Val Val Ser Lys Asn
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Ser Met Leu Asp His Gly His Leu Asp Phe Leu Val Cys Tyr Leu Leu
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<210> 15613

<211> 1857

<212> DNA

<213> Homo sapiens

<220>

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<222> (1139).. (1495)

<400> 15613

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<210> 15614
 <211> 119
 <212> PRT
 <213> Homo sapiens

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Pro Gln Gln Gly Ser Leu Ser Pro Glu Arg Trp Asp Arg Trp Ala Phe
             35             40             45
Trp Gly Leu Ala His Gln Asn Pro Gln Ala Gly Gly Leu Leu Val Ser
             50             55             60
Ala Ala Ala Ala Ala Leu Gly Asp Ser Val Leu Gly Phe Cys Pro His
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Phe Thr Ala Thr Thr Gln Glu Trp Arg Gly Arg Gln Glu Pro Gln Pro
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Gly Ser Gln Val Ser Pro Met

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (27).. (845)

<400> 15615

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-9549/13211-

<210> 15616
<211> 273
<212> PRT
<213> Homo sapiens

<400> 15616
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35 40 45
Thr Ala Lys Gly Gln Met Ala Tyr Ile Lys Leu Glu Asp Arg Thr Ser
50 55 60
Gly Glu Leu Phe Ala Gln Ala Pro Val Asp Gln Phe Pro Gly Thr Ala
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Val Glu Ser Val Thr Asp Ser Ser Arg Tyr Phe Val Ile Arg Ile Glu
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Asp Gly Asn Gly Arg Arg Ala Phe Ile Gly Ile Gly Phe Gly Asp Arg
100 105 110
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115 120 125
Val Lys Gln Gln Cys Glu Phe Ala Lys Gln Ala Gln Asn Pro Asp Gln
130 135 140
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145 150 155 160
Asn Ile Ala Asn Met Lys Lys Lys Glu Gly Ala Ala Gly Asn Pro Arg
165 170 175
Val Arg Pro Ala Ser Thr Gly Gly Leu Ser Leu Leu Pro Pro Pro Pro
180 185 190
Gly Gly Lys Thr Ser Thr Leu Ile Pro Pro Pro Gly Glu Gln Leu Ala
195 200 205
Val Gly Gly Ser Leu Val Gln Pro Ala Val Ala Pro Ser Ser Asp Gln
210 215 220
Leu Pro Ala Arg Pro Ser Gln Ala Gln Ala Gly Ser Ser Ser Asp Leu
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<210> 15617
<211> 2416
<212> DNA
<213> Homo sapiens

05629469 "072800

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<222> (81).. (2111)

<400> 15617

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<212> PRT
<213> Homo sapiens

<400> 15618

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Tyr	Ala	Phe	Phe	Ala	Ser	Glu	Tyr	Pro	Leu	Ile	Leu	Cys	Leu	Glu	Asn
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Glu	Val	Leu	Ala	Ser	Lys	Tyr	Ala	Asn	Glu	Asn	Pro	Gly	Asp	Phe	Val
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Gln	Ile	Val	Ala	Met	Asn	Phe	Gln	Thr	Pro	Gly	Leu	Met	Met	Asp	Leu
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<222> (256).. (2013)

<400> 15619

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			20					25					30		
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Lys	Thr	Lys	Pro	Thr	Gln	Asn	Ser	Val	Arg	Ala	Leu	Arg	Gly	Leu	Gly
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Val	Ile	Cys	Ile	His	Asp	Val	Ser	Ser	Thr	Tyr	Arg	Val	Pro	Val	Leu
			245						250				255		
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			260					265					270		
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      355      360      365
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      370      375      380
Ile Ser Trp Ala Arg Thr Lys Lys Ile Pro Phe Leu Gly Val Cys Leu
385      390      395      400
Gly Met Gln Leu Ala Val Ile Glu Phe Ala Arg Asn Cys Leu Asn Leu
      405      410      415
Lys Asp Ala Asp Ser Thr Glu Phe Arg Pro Asn Ala Pro Val Pro Leu
      420      425      430
Val Ile Asp Met Pro Glu His Asn Pro Gly Asn Leu Gly Gly Thr Met
      435      440      445
Arg Leu Gly Ile Arg Arg Thr Val Phe Lys Thr Glu Asn Ser Ile Leu
      450      455      460
Arg Lys Leu Tyr Gly Asp Val Pro Phe Ile Glu Glu Arg His Arg His
465      470      475      480
Arg Phe Glu Val Asn Pro Asn Leu Ile Lys Gln Phe Glu Gln Asn Asp
      485      490      495
Leu Ser Phe Val Gly Gln Asp Val Asp Gly Asp Arg Met Glu Ile Ile
      500      505      510
Glu Leu Ala Asn His Pro Tyr Phe Val Gly Val Gln Phe His Pro Glu
      515      520      525
Phe Ser Ser Arg Pro Met Lys Pro Ser Pro Pro Tyr Leu Gly Leu Leu
      530      535      540
Leu Ala Ala Thr Gly Asn Leu Asn Ala Tyr Leu Gln Gln Gly Cys Lys
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<212> PRT

<213> Homo sapiens

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Leu Leu Glu Lys Asp Asn Asp His Ser Arg Pro Asp Ile Gln Val Gln
             50             55             60
Ala Lys Arg Leu Ala Glu Lys Leu Arg Cys Asp Thr Val Val Ser Glu
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Ile Ser Thr Gly Gln Arg Thr Val Asn Phe Lys Ile Asn Arg Glu Leu
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Gln	Phe	Gly	Leu	Leu	Gly	Thr	Gly	Phe	Gln	Leu	Phe	Gly	Tyr	Glu	Glu
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Thr	Arg	Arg	Gly	Asp	Val	Thr	Phe	Leu	Glu	Asp	Val	Leu	Asn	Glu	Ile
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Gln	Leu	Arg	Met	Leu	Gln	Asn	Met	Ala	Ser	Ile	Lys	Thr	Thr	Lys	Glu
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			420					425					430		
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Trp	Asp	Arg													

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Ser Gln Asp Phe Gln Pro Arg His Ile Val Ser Tyr Leu Leu Thr Leu
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Ser His Leu Ala Ala Val Ala His Lys Thr Leu Gln Ile Lys Asp Ser
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<211> 445

<212> PRT

<213> Homo sapiens

<400> 15624

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Leu Thr Arg Ala Gly Leu Gly Pro Gly Asp Phe Asp Trp Glu Glu Leu
          35          40          45
Leu Ala Pro Pro Ala Pro Gly Gln Asp Leu Val Ile Leu Lys Arg Asn
          50          55          60
His Asn Asp Lys Asp Glu Asn Pro Cys Phe Leu Tyr Leu Arg Cys Gly
          65          70          75          80
Pro Asp Gly Gly Glu Glu Ile Ala Ser Ile Gly Ile Leu Ser Ser Ala
          85          90          95
Arg Asn Met Glu Val Tyr Leu Gly Glu Glu Tyr Cys Gly Thr Ser Arg
          100          105          110
Gly Lys Asn Val Cys Thr Val Leu Asp Asp Ser Glu His Glu Lys Ile
          115          120          125
Ile Leu Tyr Lys Lys Asn Leu Lys Leu Glu Ser Ser Thr His Ala Cys
          130          135          140
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His	His	Leu	Gly	Ile	Gln	Asn	Asn	Phe	Asp	Tyr	Lys	Arg	Phe	Ile	Lys
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Phe	Ala	Arg	Val	Cys	Glu	Val	Asp	Asn	Glu	Leu	Arg	Ile	Cys	Ala	Arg
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Ala Ser Ala Lys Pro Lys Val Leu Leu Asp Val Lys Leu Lys Ala Glu
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Ala Ala Gly Asn Gly Leu Pro Trp Arg Ile Val Pro Ala Asn Ile Ser
      35           40           45
Glu Trp Ile Cys Gln Tyr Gln Trp Glu Trp Asp Asn Thr Trp Phe Cys
      50           55           60
Phe Asp Phe Leu Ser Gln Ser Val Ser Leu Ser Pro Arg Leu Glu Cys
      65           70           75           80
Ser Gly Thr Ile Leu Ala Gln Cys Asn Leu Cys Leu Leu Gly Ser Ser
      85           90           95
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 35 40 45
 Gly His Gly Leu Ser Ile Thr Pro Leu Pro Ala Gly His Met Ile Gly
 50 55 60
 Gly Thr Ile Trp Lys Ile Val Lys Asp Gly Glu Glu Glu Ile Val Tyr
 65 70 75 80
 Ala Val Asp Phe Asn His Lys Arg Glu Ile His Leu Asn Gly Cys Ser
 85 90 95
 Leu Glu Met Leu Ser Arg Pro Ser Leu Leu Ile Thr Asp Ser Phe Asn
 100 105 110
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 Thr Asn Val Leu Glu Thr Leu Arg Gly Asp Gly Asn Val Leu Ile Ala
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Leu	Glu	Cys	Gly	Phe	Ser	Arg	Asp	Leu	Phe	Ile	Gln	Trp	Cys	Gln	Asp
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Pro	Lys	Asn	Ser	Ile	Ile	Leu	Thr	Tyr	Arg	Thr	Thr	Pro	Gly	Thr	Leu
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Tyr	Pro	Met	Phe	Pro	Ala	Pro	Glu	Glu	Arg	Ile	Lys	Trp	Asp	Glu	Tyr
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Thr	Glu	Glu	Glu	Lys	Ser	Lys	Leu	Glu	Ser	Gly	Leu	Thr	Asn	Gly	Asp
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          35             40             45
Thr Lys Ile Phe Leu Phe Gly Arg Ser Leu Gly Gly Ala Val Ala Ile
          50             55             60
His Leu Ala Ser Glu Asn Ser His Arg Ile Ser Ala Ile Met Val Glu
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Glu Leu Ser Pro Ser Arg Thr Lys Arg Leu Ala Ile Phe Pro Asp Gly
145 150 155 160
Thr His Asn Asp Thr Trp Gln Cys Gln Gly Tyr Phe Thr Ala Leu Glu
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<212> PRT

<213> Homo sapiens

<400> 15641

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Gly Thr Gly Ala Ala Cys Ser Pro Ala Leu Ser Gly Cys Gln Thr Ser
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Pro Gly Gly Gln Gln Val Gly Ser Gly Arg Ala Gly Gly Gly Thr Ala
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<212> DNA
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1882

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<212> PRT

<213> Homo sapiens

<400> 15645

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Cys	Trp	Gly	Leu	Val	Val	Arg	Leu	Arg	Ser	Ser	Glu	Leu	Leu	Gly	Val
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<212> DNA

<213> Homo sapiens

<220>

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<211> 340

<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys His Phe
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His Cys Phe Arg Ser Leu Lys Arg Gly Leu Ser Leu Lys Leu Gly Ala		
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Ser Gln Asn Ile Glu Lys Leu Arg Val Glu Thr Gln Lys Phe Glu Ala		
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 <212> PRT
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<400> 15662

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Glu	Thr	Ala	Asp	Leu	Lys	Phe	Leu	Asn	Asn	Gln	Tyr	Ala	His	Lys	Leu
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180 185 190
Pro Tyr Ile Ala Asp Leu Leu Gln Val Ala Asp Asn Arg Ile Gln Glu
195 200 205
Leu Gln Gln Glu Val His Gln Leu Gln Glu Lys Leu Ala Met Met Glu
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<211> 288

<212> PRT

<213> Homo sapiens

<400> 15664

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		195					200					205			
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<213> Homo sapiens

<400> 15666

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		20						25					30		
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 <213> Homo sapiens

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Lys	Ser	Ser	Glu	Gly	Ser	Gly	Lys	Lys	Lys	Leu	Ser	Glu	Gln	Ala	Ser
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			85					90						95	
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	115					120					125				
Phe	Glu	Ser	Phe	Glu	Ile	Ser	Lys	Lys	Arg	Asn	Lys	Ser	Phe	Glu	Met
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565 570 575
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580 585 590
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595 600 605
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<210> 15669
<211> 1171
<212> DNA
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<400> 15669
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Val	His	Asp	Asn	Lys	Val	Leu	Arg	Ile	Trp	Asn	Asn	Glu	Asp	Val	Asn
			85						90					95	
Leu	Asp	Lys	Val	Phe	Lys	Ala	Thr	Leu	Ser	Ala	Glu	Val	Tyr	Arg	Ile
			100					105					110		
Leu	Ser	Val	Gln	Gly	Thr	Glu	Pro	Leu	Val	Leu	Phe	Lys	Glu	Gly	Ala
		115					120					125			
Val	Arg	Gly	Leu	Glu	Ala	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Lys	Ile	Glu
	130					135					140				
Thr	Val	Ile	Ser	Asp	Glu	Glu	Val	Ile	Lys	Trp	Thr	Lys	Phe	Phe	Val
145					150					155					160
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			165						170					175	
Tyr	Phe	Ala	Tyr	Val	Gln	Met	Phe	Asn	Ser	Arg	Ile	Leu	Thr	Lys	Tyr
			180					185					190		
Thr	Leu	Leu	Leu	Gly	Gln	Asp	Glu	Asn	Ser	Val	Ile	Lys	Ser	Phe	Thr
		195					200					205			
Ala	Ser	Val	Asp	Arg	Lys	Phe	Ile	Ser	Leu	Met	Ser	Leu	Ser	Ser	Asp
	210					215					220				
Gly	Cys	Ile	Tyr	Glu	Thr	Leu	Ile	Pro	Ile	Arg	Pro	Ala	Asp	Pro	Glu
225					230					235				240	
Lys	Asn	Gln	Ser	Leu	Val	Lys	Ser	Leu	Leu	Leu	Lys	Ala	Val	Val	Ser
			245						250					255	
Gly	Asn	Ala	Arg	Asn	Gly	Val	Ala	Leu	Thr	Ala	Leu	Asp	Gln	Asp	His
		260						265					270		
Val	Ala	Val	Leu	Gly	Ser	Pro	Leu	Ala	Ala	Ser	Lys	Glu	Cys	Leu	Ser
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Val	Trp	Asn	Ile	Lys	Phe	Gln	Thr	Leu	Gln	Thr	Ser	Lys	Glu	Leu	Pro
	290					295					300				
Gln	Gly	Thr	Ser	Gly	Gln	Leu	Trp	Tyr	Tyr	Gly	Glu	His	Leu	Phe	Met
305					310					315					320
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			340					345					350				
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Gly	Leu	Gly	Phe	Gln	Asn	Ser	Glu	Gln	Ser	Arg	Arg	Ile	Leu	Arg	Arg		
	370					375					380						
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			405						410				415				
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			485					490					495				
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			500					505					510				
Asp	Asp	Ser	Leu	Gln	Glu	Thr	Asp	Val	Asn	Met	Glu	Ser	Val	Phe	Asp		
	515						520					525					
Tyr	Ser	Ile	Asn	Ser	Val	His	Asp	Glu	Lys	Met	Glu	Glu	Gln	Thr	Glu		
	530					535					540						
Ile	Leu	Gln	Asn	Gly	Phe	Asn	Pro	Glu	Glu	Asp	Lys	Cys	Asn	Asn	Cys		
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Asp	Gln	Glu	Leu	Asn	Lys	Lys	Pro	Gln	Asp	Glu	Thr	Lys	Glu	Ser	Thr		
			565					570					575				
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			580					585					590				
His	Ser	Ala	Tyr	Ser	Glu	Thr	Phe	Leu	Leu	Pro	His	Leu	Lys	Asp	Ile		
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Pro	Thr	Leu	Asn	Gln	Ile	Met	Asp	Trp	Ile	Cys	Leu	Leu	Leu	Asp	Ala		
			645					650					655				
Asn	Phe	Thr	Val	Val	Val	Met	Met	Pro	Glu	Ala	Lys	Arg	Leu	Leu	Ile		
			660					665					670				
Asn	Leu	Tyr	Lys	Leu	Val	Lys	Ser	Gln	Ile	Ser	Val	Tyr	Ser	Glu	Leu		
	675						680					685					
Asn	Lys	Ile	Glu	Val	Ser	Phe	Arg	Glu	Leu	Gln	Lys	Leu	Asn	Gln	Glu		
	690					695					700						
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705

710

715

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<212> DNA
<213> Homo sapiens

<220>
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<222> (182).. (1504)

<400> 15683

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<211> 441

<212> PRT

<213> Homo sapiens

<400> 15684

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35 40 45
Pro Leu Met His Ala Ala Tyr Lys Gly Lys Leu Asp Met Cys Lys Leu
50 55 60
Leu Leu Arg His Gly Ala Asp Val Asn Cys His Gln His Glu His Gly
65 70 75 80
Tyr Thr Ala Leu Met Phe Ala Ala Leu Ser Gly Asn Lys Asp Ile Thr
85 90 95
Trp Val Met Leu Glu Ala Gly Ala Glu Thr Asp Val Val Asn Ser Val
100 105 110
Gly Arg Thr Ala Ala Gln Met Ala Ala Phe Val Gly Gln His Asp Cys
115 120 125
Val Thr Ile Ile Asn Asn Phe Phe Pro Arg Glu Arg Leu Asp Tyr Tyr
130 135 140
Thr Lys Pro Gln Gly Leu Asp Lys Glu Pro Lys Leu Pro Pro Lys Leu
145 150 155 160
Ala Gly Pro Leu His Lys Ile Ile Thr Thr Thr Asn Leu His Pro Val
165 170 175
Lys Ile Val Met Leu Val Asn Glu Asn Pro Leu Leu Thr Glu Glu Ala
180 185 190
Ala Leu Asn Lys Cys Tyr Arg Val Met Asp Leu Ile Cys Glu Lys Cys
195 200 205
Met Lys Gln Arg Asp Met Asn Glu Val Leu Ala Met Lys Met His Tyr
210 215 220
Ile Ser Cys Ile Phe Gln Lys Cys Ile Asn Phe Leu Lys Asp Gly Glu
225 230 235 240
Asn Lys Leu Asp Thr Leu Ile Lys Ser Leu Leu Lys Gly Arg Ala Ser
245 250 255
Asp Gly Phe Pro Val Tyr Gln Glu Lys Ile Ile Arg Glu Ser Ile Arg

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			260					265					270				
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Ile	Ala	Pro	Val	Glu	Ile	Gly	Ser	Asp	Pro	Thr	Ala	Phe	Ser	Val	Leu		
	290					295					300						
Thr	Gln	Ala	Ile	Thr	Gly	Gln	Val	Gly	Phe	Val	Asp	Val	Glu	Phe	Cys		
305					310					315					320		
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			325						330					335			
Met	Val	Ile	Tyr	Cys	Asp	Gln	Thr	Arg	Gln	Lys	Thr	His	Trp	Phe	Thr		
		340						345					350				
His	Lys	Lys	Ile	Cys	Lys	Asn	Leu	Lys	Asp	Ile	Tyr	Glu	Lys	Gln	Gln		
	355					360						365					
Leu	Glu	Ala	Ala	Lys	Glu	Lys	Arg	Gln	Glu	Glu	Asn	His	Gly	Lys	Leu		
	370					375					380						
Asp	Val	Asn	Ser	Asn	Cys	Val	Asn	Glu	Glu	Gln	Pro	Glu	Ala	Glu	Val		
385					390					395					400		
Gly	Ile	Ser	Gln	Lys	Asp	Ser	Asn	Pro	Glu	Asp	Ser	Gly	Glu	Gly	Lys		
			405						410				415				
Lys	Glu	Ser	Leu	Glu	Ser	Glu	Ala	Glu	Leu	Glu	Gly	Leu	Gln	Asp	Ala		
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<210> 15685
 <211> 1834
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (15).. (530)

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 tcaagaagga attactgcag ctaattgagc aagcccagaa actaacggct actcaaagcc 360
 acttagaaaa caggaagcag cagctgcagc aggaacagtg gtatctggag tccttaatcc 420
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 aataacactg attaaataag aactggagca agtactctta agtgctacat taacctggtt 600
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 aaggattaga tggttttatc caacagtcct actagatatt tggttaaccag cttcccttaa 720
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tacctttaag gatagcattc caaatagact ttgaatagcg ttctgccagt ttatcctcat 960
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 <212> PRT
 <213> Homo sapiens

<400> 15686

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			20					25					30		
Thr	Arg	Glu	Val	Gln	Ala	Gln	Leu	Leu	Gln	Glu	Lys	Arg	Leu	Leu	Glu
			35				40					45			
Lys	Gln	Leu	Ser	Glu	Pro	Asp	Arg	Arg	Leu	Leu	Gly	Lys	Arg	Lys	Arg
			50			55					60				
Arg	Glu	Leu	Asn	Met	Lys	Ala	Gln	Ala	Leu	Lys	Leu	Ala	Ala	Lys	Arg
			65			70				75				80	
Phe	Ile	Phe	Glu	Tyr	Ser	Cys	Gly	Ile	Asn	Arg	Glu	Asn	Gln	Gln	Phe
			85					90						95	
Lys	Lys	Glu	Leu	Leu	Gln	Leu	Ile	Glu	Gln	Ala	Gln	Lys	Leu	Thr	Ala
			100					105					110		
Thr	Gln	Ser	His	Leu	Glu	Asn	Arg	Lys	Gln	Gln	Leu	Gln	Gln	Glu	Gln
			115				120					125			
Trp	Tyr	Leu	Glu	Ser	Leu	Ile	Gln	Ala	Arg	Gln	Arg	Leu	Gln	Gly	Ser
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His	Asn	Gln	Cys	Leu	Asn	Arg	Gln	Asp	Val	Pro	Lys	Thr	Thr	Pro	Ser
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 <212> DNA
 <213> Homo sapiens

<220>
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<210> 15688
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 15688
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 Gln Val Ala Asp Arg Arg Val Ile Ser Thr Thr Asp Ala Glu Arg Gln

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Lys Tyr Lys Leu Ser Arg Ala Phe Val Arg Pro Ser Gly Thr Glu Asp		
65	70	75
Val Val Arg Val Tyr Ala Glu Ala Asp Ser Gln Glu Ser Ala Asp His		
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<210> 15689
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 <212> DNA
 <213> Homo sapiens

<400> 15689

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Asp Val Glu Lys Lys Glu Asp Leu Pro Thr Ser Ser Glu Thr Phe Gly
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Leu His Val Glu Asn Val Pro Lys Met Val Phe Pro Gln Pro Glu Ser
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Thr Leu Ser Asn Lys Arg Lys Asn Asn Gln Gly Ser Ser Phe Gln Ala
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<211> 627

<212> PRT

<213> Homo sapiens

<400> 15693

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<213> Homo sapiens

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 Leu Asp Ile Arg Ala Met Pro Leu Ser His Ile Met Gly Gln Gly Ser
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<211> 341

<212> PRT

<213> Homo sapiens

<400> 15698

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		260						265					270		
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<212> DNA
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<211> 519

<212> PRT

<213> Homo sapiens

<400> 15700

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Val	Leu	Asp	Asp	Asp	Arg	Glu	Asp	Leu	Phe	Ala	Glu	Ala	Thr	Glu	Glu	65	70	75	80
Val	Ser	Leu	Asp	Ser	Pro	Glu	Arg	Glu	Pro	Ile	Leu	Ser	Ser	Glu	Pro	85	90	95	
Ser	Pro	Ala	Val	Thr	Pro	Val	Thr	Pro	Thr	Thr	Leu	Ile	Ala	Pro	Arg	100	105	110	
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<213> Homo sapiens

<400> 15702

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Ile Leu Asn Leu Val Ser Pro Leu Ser Tyr Ser Val Ala Asn Ala Thr
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Lys Arg Ile Met Val Ile Thr Val Ser Leu Ile Met Leu Arg Asn Pro
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Phe Leu Tyr Asn Lys Thr Lys Tyr Asp Ala Asn Gln Gln Ala Arg Lys
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<212> DNA

<213> Homo sapiens

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<222> (88).. (1170)

<400> 15704

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 <212> PRT
 <213> Homo sapiens

<400> 15705

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	210		215		220
Ile	Cys	Ile	Asp	Ser	Ala
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	245		250		255
Ile	Asn	Ala	Asp	Ala	Tyr
	260		265		270
Glu	Ala	Ala	Ala	Pro	Glu
	275		280		285
Gly	Gln	Ile	Asp	Asp	Leu
	290		295		300
Ile	Leu	Gly	Leu	Ala	Glu
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 <212> DNA
 <213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

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			35				40					45			
Pro	Glu	Ser	Glu	Glu	Ile	Ala	Gln	Leu	Leu	Ser	Gly	Ser	Tyr	Ile	His
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Trp	Gln	Glu	Ile	Ile	Ala	Leu	Tyr	Glu	Lys	Asp	Asn	Thr	Tyr	Leu	Val
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			115				120					125			
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<220>
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<222> (892).. (1770)

<400> 15711

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<212> PRT
<213> Homo sapiens

<400> 15712

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-9650/13211-

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Cys	Glu	Tyr	Gly	Asp	Ala	Cys	Thr	Lys	Ala	His	Ser	Ala	Gln	Glu	Leu				
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Gln	Glu	Trp	Val	Arg	Arg	Thr	Gln	Ala	Val	Glu	Leu	Arg	Gly	Gln	Ala				
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Ala	Trp	Gln	Asp	Gly	Leu	Val	Pro	Tyr	Gln	Glu	Arg	Leu	Leu	Ala	Glu				
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Tyr	Gln	Arg	Ser	Ser	Ser	Glu	Val	Leu	Val	Leu	Ala	Glu	Thr	Leu	Asp				
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Ala	Leu	Pro	Leu	Ser	Thr	Cys	Val	Thr	Cys	Ser	Arg	Ser	Leu	Ser	Leu				
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Leu	Gly	Arg	Val	Ile	Leu	Trp	Ser	Ile	Trp	Val	Lys	Thr	Arg	Ile	Trp				
			260					265					270						
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<212> DNA

<213> Homo sapiens

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<222> (333).. (1955)

<400> 15713

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<210> 15714

<211> 541

<212> PRT

<213> Homo sapiens

<400> 15714

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Pro Arg Ala Gly Arg Pro Arg Ala Gln Ala Arg Gly Val Arg Gly Arg
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Gly Leu Leu Leu Arg Pro Arg Pro Ala Lys Glu Leu Pro Leu Pro Arg

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Pro Trp Ile Arg Glu Leu Ile Leu Gly Ser Glu Thr Pro Ser Ser Pro		95
	100	105
Arg Ala Gly Gln Leu Leu Glu Asp Ala Glu Ala Ala Val Ala Gly Pro		110
	115	120
Ser His Ala Pro Asp Thr Ser Asp Val Gly Ala Thr Leu Leu Val Ser		125
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Asp Gly Thr His Ser Val Arg Cys Leu Val Thr Arg Glu Ala Leu Asp		140
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Thr Ser Asp Trp Glu Glu Lys Glu Phe Gly Phe Arg Gly Thr Glu Gly		160
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Glu Ser Cys Leu Thr Leu Glu Gly Pro Cys Thr Ala Pro Pro Val Thr		270
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His Trp Ala Ala Ser Arg Cys Lys Ala Thr Gly Glu Ala Val Tyr Thr		285
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305	310	315
Ser Ser Leu Gly Pro Cys Gln Arg Thr Gln Gly Pro Glu Leu Pro Pro		320
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Pro Ser Ser Pro Ser Ser Ser Gly Thr Pro Ala Leu Pro Gly His Met		350
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Ser Ser Glu Glu Ser Gly Thr Ser Ile Ser Leu Leu Pro Ala Leu Ser		365
	370	375
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Ala Ile Cys Ser Ala Pro Ala Thr Leu Thr Pro Arg Ser Pro His Ala		400
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Ser Arg Thr Pro Ser Ser Pro Leu Gln Ser Cys Thr Pro Ser Leu Ser		415
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Pro Arg Ser His Val Pro Ser Pro His Gln Ala Leu Val Thr Arg Pro		430

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Gln Lys Pro Ser Leu Glu Phe Lys Glu Phe Val Gly Leu Pro Cys Lys				
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Asn Arg Pro Pro Phe Pro Arg Thr Gly Ala Thr Arg Gly Ala Gln Glu				
465		470		475
Pro Cys Ser Val Trp Glu Pro Pro Lys Arg His Arg Asp Gly Ser Ala				
		485		490
Phe Gln Tyr Glu Tyr Glu Pro Pro Cys Thr Ser Leu Cys Ala Arg Val				
		500		505
Gln Ala Val Arg Leu Pro Pro Gln Leu Met Ala Trp Ala Leu His Phe				
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Leu Met Asp Ala Gln Pro Gly Ser Glu Pro Thr Pro Met				
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 <212> DNA
 <213> Homo sapiens

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 <222> (2).. (1537)

<400> 15715

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 <212> PRT
 <213> Homo sapiens

<400> 15716

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		20					25						30		
Phe	Val	Leu	Val	His	Pro	Asp	Val	Lys	Asn	Trp	Ile	Lys	Tyr	Ala	Arg
		35				40						45			
Phe	Glu	Glu	Lys	His	Ala	Tyr	Phe	Ala	His	Ala	Arg	Lys	Val	Tyr	Glu
	50					55				60					
Arg	Ala	Val	Glu	Phe	Phe	Gly	Asp	Glu	His	Met	Asp	Glu	His	Leu	Tyr
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Val	Ala	Phe	Ala	Lys	Phe	Glu	Glu	Asn	Gln	Lys	Glu	Phe	Glu	Arg	Val
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Arg	Val	Ile	Tyr	Lys	Tyr	Ala	Leu	Asp	Arg	Ile	Ser	Lys	Gln	Asp	Ala
			100					105					110		
Gln	Glu	Leu	Phe	Lys	Asn	Tyr	Thr	Ile	Phe	Glu	Lys	Lys	Phe	Gly	Asp
		115					120					125			
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	210					215						220			

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-9655/13211-

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260 265 270
Phe Lys Val Tyr Ile Glu Leu Glu Leu Gln Leu Arg Glu Phe Asp Arg
275 280 285
Cys Arg Lys Leu Tyr Glu Lys Phe Leu Glu Phe Gly Pro Glu Asn Cys
290 295 300
Thr Ser Trp Ile Lys Phe Ala Glu Leu Glu Thr Ile Leu Gly Asp Ile
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Asp Arg Ala Arg Ala Ile Tyr Glu Leu Ala Ile Ser Gln Pro Arg Leu
325 330 335
Asp Met Pro Glu Val Leu Trp Lys Ser Tyr Ile Asp Phe Glu Ile Glu
340 345 350
Gln Glu Glu Thr Glu Arg Thr Arg Asn Leu Tyr Arg Arg Leu Leu Gln
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Arg Thr Gln His Val Lys Val Trp Ile Ser Phe Ala Gln Phe Glu Leu
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Ser Ser Gly Lys Glu Gly Ser Leu Thr Lys Cys Arg Gln Ile Tyr Glu
385 390 395 400
Glu Ala Asn Lys Thr Met Arg Asn Cys Glu Glu Lys Glu Glu Arg Leu
405 410 415
Met Leu Leu Glu Ser Trp Arg Ser Phe Glu Glu Glu Phe Gly Thr Ala
420 425 430
Ser Asp Lys Glu Arg Val Asp Lys Leu Met Pro Glu Lys Val Lys Lys
435 440 445
Arg Arg Lys Val Gln Thr Asp Asp Gly Ser Asp Ala Gly Trp Glu Glu
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<212> DNA

<213> Homo sapiens

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09629469-072800

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 <213> Homo sapiens

<400> 15721

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000220"6942960

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008270" 69462960

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<213> Homo sapiens

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      35             40             45
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Glu Gln Arg Gly Pro Tyr Leu Pro Glu Leu Leu Ser Asn Ile Arg Leu
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000220" 69462960

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<400> 15749

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Ala Leu Ala Pro Gly Gln Ala Thr Ser Ser Gly Val Arg Ser Leu Ile
 50          55          60
Arg Leu Ser Leu Ala His Pro Ser Leu Ser His Gly Phe Phe Ala Asp
 65          70          75          80
Arg Asp Thr His His Thr Cys Leu Leu Tyr Leu Glu Val Val Phe Pro
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Ile Pro Thr Trp Leu Thr Ser Ser Leu His Ser Ser Leu Cys Ser Asp
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785 790 795 800
Ile Glu Pro Leu Val Tyr Leu Cys Gln Thr Asp Thr Glu Ala Val Arg
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          50             55             60
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          65             70             75             80
Leu Val Asp Leu Ala Asp Glu Val Ala Ser Val Tyr Gln Ser Tyr Gln
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Pro Ala Glu Arg Pro Gly Pro Pro Thr Pro Ala Ala Ala His Ser Ile
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<400> 15783

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<400> 15784

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Val	Ile	Ser	Ser	Val	Gly	Ala	Asn	Glu	Ile	Trp	Val	Arg	Lys	Thr	Ser
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Gln Phe Arg Ser Leu Arg Asp Ser Val Thr Tyr Thr Ser Ser Asp Arg
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Leu Ala Ala Arg Leu Thr Ser Gln Lys Leu Phe His Glu Leu Cys Pro
50 55 60
Val Lys Arg Ser His Arg Gln Arg Lys Tyr Cys Val Val Leu Leu Thr
65 70 75 80
Ala Glu Thr Thr Lys Leu Ser Lys Pro Phe Glu Ala Phe Leu Ser Phe
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Ala Leu Ala Asn Thr Gln Asp Thr Val Arg Phe Val His Val Tyr Ser
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Phe Gln Gly Lys Ser Ala Val Ser Ile Leu Glu Arg Arg Asn Thr Ala
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 <212> PRT
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          35          40          45
Pro Trp Ala Leu Gln Pro Ile Leu Leu Glu Gly Ser Arg Leu Trp Gly
          50          55          60
Thr Leu Gly Ile Ala Leu Gly Gly Leu Gln Arg Ile Ser Val Leu Gly
          65          70          75          80
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09629469.072800

<213> Homo sapiens

<220>

<221> CDS

<222> (2412).. (2987)

<400> 15795

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<210> 15796
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 <212> PRT
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             20             25             30
Arg Lys Leu Asn Asp Ala Leu Asp Arg Leu Glu Glu Leu Lys Glu Phe
             35             40             45
Ala Asn Phe Asp Phe Asp Val Trp Arg Lys Lys Tyr Met Arg Trp Met
             50             55             60
Asn His Lys Lys Ser Arg Val Met Asp Phe Phe Arg Arg Ile Asp Lys
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-9760/13211-

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<210> 15797

<211> 4006

<212> DNA

<213> Homo sapiens

<220>

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<211> 574

<212> PRT

<213> Homo sapiens

<400> 15798

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 <212> PRT
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Leu	Gln	Arg	Lys	Asp	Val	Lys	Gln	Ala	Leu	Ile	Gln	Trp	Gln	Glu	Arg
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Ile	Glu	Phe	Ala	His	Lys	Leu	Leu	Thr	Leu	Leu	Asn	Ser	Tyr	Ser	Pro
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Pro	Glu	Leu	Arg	Asn	Ala	Cys	Ile	Asp	Val	Leu	Lys	Glu	Leu	Val	Leu
					70					75					80
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Asn	His	Cys	Thr	Tyr	His	His	Ser	Asn	Ile	Pro	Met	Ser	Leu	Gly	Pro
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Phe	Met	Thr	His	Phe	Leu	Leu	Lys	Val	Gln	Ser	Gln	Val	Phe	Ser	Glu
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Ala	Asn	Cys	Ala	Asn	Leu	Ile	Ser	Thr	Leu	Ile	Thr	Asp	Leu	Ile	Ser
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Gln	Tyr	Gln	Asn	Leu	Gln	Ser	Asp	Phe	Ser	Asn	Arg	Val	Glu	Ile	Ser
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Lys	Ala	Ser	Ala	Ser	Leu	Asn	Gly	Val	Arg	Thr	Met	Gln	Arg	Arg	Arg
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             35             40             45
Asp Glu Gly Lys Asp Cys Cys Asp Arg Met Gly Ser Cys Lys Cys Gly
             50             55             60
Thr His Thr Gly His Phe Glu Cys Ile Cys Glu Lys Gly Tyr Tyr Gly
             65             70             75             80
Lys Gly Leu Gln Tyr Glu Cys Thr Ala Cys Pro Ser Gly Thr Tyr Lys
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Pro Glu Gly Ser Pro Gly Gly Ile Ser Ser Cys Ile Pro Cys Pro Asp
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Glu Asn His Thr Ser Pro Pro Gly Ser Thr Ser Pro Glu Asp Cys Val
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Cys Arg Glu Gly Tyr Arg Ala Ser Gly Gln Thr Cys Glu Leu Val His
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<212> PRT
<213> Homo sapiens

<400> 15822
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35 40 45
His Val Leu Cys Arg Glu Met Asp Glu Ala Gly Asn Tyr His Ser Gln
50 55 60
Gln Thr Ile Thr Arg Thr Glu Asn Gln Thr Pro His Val Leu Thr His
65 70 75 80
Gln Trp Glu Leu Asn Ser Glu Asn Thr Trp Thr Gln Gly Gly Glu His
85 90 95
His Thr Pro Gly Pro Val Arg Glu Trp Glu Thr Arg Gly Gly Ile Ala
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Asn Leu Ser Thr Cys Ile Pro Met
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<213> Homo sapiens

<220>
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<222> (1160).. (1633)

<400> 15823
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<210> 15824
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 15824
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 35 40 45
 Val Ile Leu Ile Gly Thr Thr Arg Asn Phe Val Leu Gln Gly Thr Leu
 50 55 60
 Ser Gly Asp Phe Thr Pro Ile Thr Gln Gly His Thr Asp Glu Leu Trp

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Asp	Lys	His	Ala	Thr	Leu	Trp	Asp	Ala	Val	Gly	His	Arg	Pro	Val	Trp
		100		105		110									
Asp	Lys	Ile	Ile	Glu	Val	Asn	Met	His	Ile	Thr	Phe	Pro	Phe	Phe	Leu
		115		120		125									
Gln	Lys	Phe	Ile	Trp	Asn	Met	Phe	Ile	Tyr	Phe	Leu	His	Glu	Ile	Asn
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (293).. (601)

<400> 15825

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<210> 15826
 <211> 103
 <212> PRT
 <213> Homo sapiens

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<400> 15826
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Pro Cys Glu Pro Leu Ala Gln Leu Leu Cys Thr Ala Arg His His Leu
             35             40             45
Val Ala Val Leu Glu Arg Cys Thr Gly Ile Gln Ala Ser Ser Val Val
             50             55             60
Ala Ser Pro Pro Ala Pro Pro Thr Ser Ser Arg Arg Pro Leu Ser Gly
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Asp Gly Arg Arg Leu Gly Asp
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<210> 15827
 <211> 1751
 <212> DNA
 <213> Homo sapiens

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<220>
<221> CDS
<222> (86).. (1354)

<400> 15827

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<210> 15828
<211> 423
<212> PRT
<213> Homo sapiens

<400> 15828

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Leu Tyr Leu Val Ala Thr Thr Ser Lys Asn Ala Asn Ala Ser Leu Val
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Tyr Ser Phe Leu Tyr Lys Thr Ile Glu Val Phe Cys Glu Tyr Phe Lys
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Glu Leu Glu Glu Glu Ser Ile Arg Asp Asn Phe Val Ile Val Tyr Glu
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Leu Leu Asp Glu Leu Met Asp Phe Gly Phe Pro Gln Thr Thr Asp Ser
115 120 125
Lys Ile Leu Gln Glu Tyr Ile Thr Gln Gln Ser Asn Lys Leu Glu Thr
130 135 140
Gly Lys Ser Arg Val Pro Pro Thr Val Thr Asn Ala Val Ser Trp Arg
145 150 155 160
Ser Glu Gly Ile Lys Tyr Lys Lys Asn Glu Val Phe Ile Asp Val Ile
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Glu Ser Val Asn Leu Leu Val Asn Ala Asn Gly Ser Val Leu Leu Ser
180 185 190
Glu Ile Val Gly Thr Ile Lys Leu Lys Val Phe Leu Ser Gly Met Pro
195 200 205
Glu Leu Arg Leu Gly Leu Asn Asp Arg Val Leu Phe Glu Leu Thr Gly
210 215 220
Arg Ser Lys Asn Lys Ser Val Glu Leu Glu Asp Val Lys Phe His Gln
225 230 235 240
Cys Val Arg Leu Ser Arg Phe Asp Asn Asp Arg Thr Ile Ser Phe Ile
245 250 255
Pro Pro Asp Gly Asp Phe Glu Leu Met Ser Tyr Arg Leu Ser Thr Gln
260 265 270
Val Lys Pro Leu Ile Trp Ile Glu Ser Val Ile Glu Lys Phe Ser His
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Ser Arg Val Glu Ile Thr Val Lys Ala Lys Gly Gln Phe Lys Lys Gln
290 295 300
Ser Val Ala Asn Gly Val Glu Ile Ser Val Pro Val Pro Ser Asp Ala
305 310 315 320
Asp Ser Pro Arg Phe Lys Thr Ser Val Gly Ser Ala Lys Tyr Val Pro
325 330 335
Glu Arg Asn Val Val Ile Trp Ser Ile Lys Ser Phe Pro Gly Gly Lys
340 345 350
Glu Tyr Leu Met Arg Ala His Phe Gly Leu Pro Ser Val Glu Lys Glu
355 360 365
Glu Val Glu Gly Arg Pro Pro Ile Gly Val Lys Phe Glu Ile Pro Tyr
370 375 380
Phe Thr Val Ser Gly Ile Gln Val Arg Tyr Met Lys Ile Ile Glu Lys
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Ser Gly Tyr Gln Ala Leu Pro Trp Val Arg Tyr Ile Thr Gln Ser Gly
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Asp Tyr Gln Leu Arg Thr Ser
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<210> 15829
<211> 2348
<212> DNA
<213> Homo sapiens

<400> 15829

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<210> 15842

<211> 607

<212> PRT

<213> Homo sapiens

09629469.072800

<400> 15842

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Glu	Ser	Val	Thr	Leu	Ser	Ser	Pro	Ala	Leu	Gly	Gln	Leu	Val	Lys	Ser
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Gln	Leu	Gln	Thr	Lys	Ala	Met	Ala	Leu	Leu	Thr	Ala	Leu	Leu	Gln	Gly
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Leu	Asn	Lys	Thr	Trp	Lys	Glu	Met	Arg	Ala	Thr	Gln	Glu	Asp	Phe	Asp
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Lys	Val	Met	Gln	Val	Val	Arg	Glu	Gln	Leu	Ala	Arg	Thr	Leu	Ala	Leu
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09629469.072300

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Gly Thr Leu Ala Pro Pro Ile Leu Glu Leu Arg Glu Lys Leu Lys Pro				
	405		410	415
Glu Leu Met Gly Leu Ile Arg Gln Gln Arg Leu Leu Arg Leu Cys Glu				
	420		425	430
Gly Thr Leu Phe Arg Lys Ile Ser Ser Arg Arg Arg Gln Asp Lys Leu				
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Trp Phe Cys Cys Leu Ser Pro Asn His Lys Leu Leu Gln Tyr Gly Asp				
	450		455	460
Met Glu Glu Gly Ala Ser Pro Pro Thr Leu Glu Ser Leu Pro Glu Gln				
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Leu Pro Val Ala Asp Met Arg Ala Leu Leu Thr Gly Lys Asp Cys Pro				
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His Val Arg Glu Lys Gly Ser Gly Lys Gln Asn Lys Asp Leu Tyr Glu				
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Leu Ala Phe Ser Ile Ser Tyr Asp Arg Gly Glu Glu Glu Ala Tyr Leu				
	515		520	525
Asn Phe Ile Ala Pro Ser Lys Arg Glu Phe Tyr Leu Trp Thr Asp Gly				
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Leu Ser Ala Leu Leu Gly Ser Pro Met Gly Ser Glu Gln Thr Arg Leu				
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Asp Leu Glu Gln Leu Leu Thr Met Glu Thr Lys Leu Arg Leu Leu Glu				
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Leu Glu Asn Val Pro Ile Pro Glu Arg Pro Pro Pro Val Pro Pro Pro				
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 <212> DNA
 <213> Homo sapiens

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 <222> (2).. (1897)

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09629469.072800

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<212> PRT

<213> Homo sapiens

<400> 15844

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Asn Leu Arg Gly Ile Pro Ile Gly Met Leu Val Leu Gly Asn Lys Val
          35             40             45
Lys Ala Val Gly Glu Val Thr Asn Ser Glu Gly Thr Trp Val Gln Leu
          50             55             60
Asp Gln Asn Ser Met Val Glu Phe Cys Glu Ser Asp Glu Gly Glu Ala
          65             70             75             80
Trp Ser Leu Ala Arg Asp Arg Gly Gly Asn Gln Tyr Leu Arg His Glu
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Asp Glu Gln Ala Leu Leu Asp Gln Asn Ser Gln Thr Pro Pro Pro Ser
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Val Leu Ser	Met Leu Lys	Glu Pro	Pro Leu His	Glu Lys Cys	Glu Asp
545		550		555	560
Gly Lys Thr	Glu Thr Thr	Phe Glu	Met Ser Met	His Asn Thr	Met Lys
	565		570		575
Ser Lys Ser	Pro Leu Pro	Leu Thr	Leu Gln His	Leu Val Ala	Phe Trp
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Glu Asp Ile	Ser Leu Ala	Thr Ile	Lys Ala Ala	Phe Gln Asn	Met Ile
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 <212> DNA
 <213> Homo sapiens

<400> 15845

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 <222> (296).. (2398)

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<211> 701

<212> PRT

<213> Homo sapiens

<400> 15847

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35 40 45
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50 55 60

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-9833/13211-

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Thr Tyr Ile Glu Gly Leu Pro Gln Gly Pro Thr Ala Glu Glu Thr
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Ile Glu His Asp Pro Val Lys Pro Arg Gln Leu Pro Lys Thr Ile Gly
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Cys Ser Lys Asn Phe Pro Gly Lys Thr Ala Leu Ala Thr Arg Glu Gln
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Cys Ala Leu Thr Arg Tyr Asp Ala His Lys Met Ser His Asp Ala Phe
385 390 395 400
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Pro Pro Leu Thr Met Leu Phe Leu Cys Ala Thr Lys Phe Ser Ala Ser
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 <211> 2338
 <212> DNA
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<400> 15848

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 <212> PRT
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 15851

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Leu Thr Glu Ala Ser Leu Val Ser Val Arg Lys Ser Arg Leu Leu Ala
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Ala Leu Asp Glu Glu Arg Pro Gly Arg Gln Glu Asp Ala Glu Tyr Gln
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Ala Phe Arg Glu Ala Ile Thr Glu Ala Val Glu Ala Pro Ala Ala Ala
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 Lys Leu Ala Gly Ala Gln Arg Gln Leu Gly Gln Leu Arg Ala Gln Glu
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<400> 15854

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Asp	Thr	Leu	Glu	Gln	Val	Lys	Asn	Ser	Pro	Thr	Pro	Ala	Thr	Ser	Thr
				565					570					575	
Glu	Ser	Leu	Ser	Pro	Leu	His	Asn	Val	Ala	Leu	Arg	Ser	Ser	Glu	Pro
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Gln	Ile	Arg	Arg	Ser	Thr	Ser	Ser	Ser	Ser	Asp	Thr	Met	Ser	Thr	Phe
	595						600					605			
Lys	Pro	Met	Val	Ala	Pro	Arg	Met	Gly	Val	Gln	Leu	Lys	Pro	Pro	Ala
	610					615					620				
Leu	Arg	Pro	Lys	Pro	Ala	Val	Leu	Pro	Lys	Thr	Asn	Pro	Thr	Ile	Gly
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 <212> DNA
 <213> Homo sapiens

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 <222> (174).. (1070)

<400> 15855

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 <213> Homo sapiens

<400> 15856

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			20					25					30		
Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg	Ser	Arg	Arg	Pro	Val	Asn
		35					40					45			
Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr	Val	Pro	Ile	Leu	Gly	Asn
	50				55					60					
Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys	Val	Ile	Val	Ser	Ser	Ser
	65				70					75				80	
Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro	Glu	Ile	Glu	Arg	Ala	Glu
				85					90					95	
Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	Thr	Thr	Gly	Tyr	Ser	Ala	Asp
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Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	Val	Val	Ala	His	Ser	Ser	Val	Phe
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Ser	Leu	Val	Arg	Val	Ile	Gln	Arg	Ala	Gly	Leu	Val	Phe	Pro	Asn	Met
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Arg	Leu	Gln	Arg	Met	Pro	Tyr	His	Tyr	Tyr	Glu	Pro	Lys	Gly	Pro	Asp
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His	Arg	Phe	Ile	Thr	Glu	Lys	Arg	Val	Phe	Ser	Ser	Trp	Ala	Gln	Leu
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 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 15858
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 35 40 45
 Asp Thr Ala Ala Ala Gly Gln Leu Val Lys Asp Gly Val Thr Gln Val
 50 55 60
 Val Val Ser Glu Glu Gly Ala Val His Met Val Ala Gly Glu Gly Ala
 65 70 75 80
 Gln Ile Ile Met Gln Glu Ala Gln Gly Glu His Met Asp Leu Val Glu
 85 90 95
 Ser Asp Gly Glu Ile Ser Gln Ile Ile Val Thr Glu Glu Leu Val Gln
 100 105 110
 Ala Met Val Gln Glu Ser Ser Gly Gly Phe Ser Glu Gly Thr Thr His
 115 120 125
 Tyr Ile Leu Thr Glu Leu Pro Pro Gly Val Gln Gly Glu Pro Gly Leu
 130 135 140
 Tyr Ser His Thr Val Leu Glu Thr Ala Asp Ser Gln Glu Leu Leu Gln
 145 150 155 160
 Ala Gly Ala Thr Leu Gly Thr Glu Ala Gly Ala Pro Ser Arg Ala Glu
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 Gln Leu Ala Ser Val Val Ile Tyr Thr Gln Glu Gly Ser Ser Ala Ala
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<210> 15859
<211> 2252
<212> DNA
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<220>
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<222> (329).. (1915)

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2252

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<211> 529
<212> PRT
<213> Homo sapiens

<400> 15860

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Gly	Thr	His	Arg	Phe	Phe	Val	Ala	Glu	Gln	Val	Gly	Val	Val	Trp	Val
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Tyr	Leu	Pro	Asp	Gly	Ser	Arg	Leu	Glu	Gln	Pro	Phe	Leu	Asp	Leu	Lys
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Asp	Asp	Val	Leu	Pro	Ile	Tyr	Ala	Tyr	Gly	His	Ala	Val	Gly	Lys	Ser
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 340 345 350
 Gly Ser Thr Thr Ser Cys Ala Phe Pro Gly Leu Ile Ser Thr His Ser
 355 360 365
 Lys Phe Ile Ile Ser Phe Ala Glu Asp Glu Ala Gly Glu Leu Tyr Phe
 370 375 380
 Leu Ala Thr Ser Tyr Pro Ser Ala Tyr Ala Pro Arg Gly Ser Ile Tyr
 385 390 395 400
 Lys Phe Val Asp Pro Ser Arg Arg Ala Pro Pro Gly Lys Cys Lys Tyr
 405 410 415
 Lys Pro Val Pro Val Arg Thr Lys Ser Lys Arg Ile Pro Phe Arg Pro
 420 425 430
 Leu Ala Lys Thr Val Leu Asp Leu Leu Lys Glu Gln Ser Glu Lys Ala
 435 440 445
 Ala Arg Lys Ser Ser Ser Ala Thr Leu Ala Ser Gly Pro Ala Gln Gly
 450 455 460
 Leu Ser Glu Lys Gly Ser Ser Lys Lys Leu Ala Ser Pro Thr Ser Ser
 465 470 475 480
 Lys Asn Thr Leu Arg Gly Pro Gly Thr Lys Lys Lys Ala Arg Val Gly
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 Gly Arg Met Arg Pro Ser Ala Glu Gln Lys Arg Ala Gly Arg Ser Leu
 515 520 525
 Pro

<210> 15861
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (281).. (2449)

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<400> 15867

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<210> 15868

<211> 192

<212> PRT

<213> Homo sapiens

<400> 15868

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<212> PRT

<213> Homo sapiens

<400> 15871

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	50				55						60				
Arg	Leu	Leu	Gly	Ala	Ser	Ala	Ser	Val	Thr	Gly	Leu	Pro	Phe	Gly	Met
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 <212> DNA
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 <222> (148).. (1902)

<400> 15872

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 <212> PRT
 <213> Homo sapiens

<400> 15873

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65					70				75					80	
Cys	Cys	Thr	Thr	Asp	Asn	Asn	Lys	Gln	Ile	His	Lys	Ile	His	Arg	Asp
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<213> Homo sapiens

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<400> 15876

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<213> Homo sapiens

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<213> Homo sapiens

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<400> 15903

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<212> PRT

<213> Homo sapiens

<400> 15904

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<213> Homo sapiens

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Pro Lys Pro Lys Glu Ser Thr Thr Gly Leu Leu Lys Ala Arg Lys Ile
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Phe Val Thr Glu Val Ala Tyr Lys Met Glu Leu Leu Gln Ile Glu Asn
180 185 190
Met Val Leu Ser Pro Trp Thr Leu Ile Val Ala Val Leu Leu Gln Asn
195 200 205
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 Ile Lys Val Leu Gln Gln Leu Ser Arg Lys Asp Pro Gly Lys Ala Thr

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<212> DNA

<213> Homo sapiens

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Cys His Arg Arg Met Gly Val Arg Pro Ala Val Pro Leu Leu Thr Gln
545 550 555 560
Arg Gly Ser Gly Glu Ala Arg His His Phe Pro Ser Leu His Thr Lys
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<210> 15935
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 <212> PRT
 <213> Homo sapiens

<400> 15935
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<213> Homo sapiens

<220>

<221> CDS

<222> (614).. (1411)

<400> 15936

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<210> 15937

<211> 266

<212> PRT

<213> Homo sapiens

<400> 15937

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          20             25             30

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008220"69462960

Glu Lys Gly His Leu Leu Arg Leu Pro Ala Ala Phe Arg Lys Ala Ala
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Ser Gln Asn Ser Ser Leu Trp Ala Gln Leu Ser Ser Thr Gln Thr Ser
50 55 60
Asp Ser Thr Asp Ala Ala Ala Lys Thr Gln Phe Leu Gln Asn Met
65 70 75 80
Gln Thr Ala Ser Gly Gly Pro Gln Pro Arg Leu Ser Ala Val Glu Val
85 90 95
Glu Ala Glu Ala Gly Arg Leu Arg Lys Ala Cys Ser Leu Leu Arg Leu
100 105 110
Arg Met Arg Glu Glu Leu Ser Ala Ala Pro Met Asp Trp Met Gln Glu
115 120 125
Tyr Arg Cys Leu Leu Thr Leu Gly Leu Gln Ala Met Val Gly Gln
130 135 140
Cys Leu His Arg Leu Gln Glu Leu Arg Ala Ala Val Ala Glu Gln Pro
145 150 155 160
Pro Arg Pro Cys Pro Val Gly Arg Pro Pro Gly Ala Ser Pro Ser Cys
165 170 175
Gly Gly Arg Ala Glu Pro Ala Trp Ser Pro Gln Leu Leu Val Tyr Ser
180 185 190
Ser Thr Gln Glu Leu Gln Thr Leu Ala Ala Leu Lys Leu Arg Val Ala
195 200 205
Val Leu Asp Gln Gln Ile His Leu Glu Lys Val Leu Met Ala Glu Leu
210 215 220
Leu Pro Leu Val Ser Ala Ala Gln Pro Gln Gly Pro Pro Trp Leu Ala
225 230 235 240
Leu Cys Arg Ala Val His Ser Leu Leu Cys Glu Gly Gly Ala Arg Val
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Leu Thr Ile Leu Arg Asp Glu Pro Ala Val
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<210> 15938
<211> 2475
<212> DNA
<213> Homo sapiens

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<222> (378).. (1550)

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008220" 69462960

009240"69462960

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<210> 15939

<211> 391

<212> PRT

<213> Homo sapiens

<400> 15939

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-9932/13211-

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Cys Lys Arg Ile Lys Asp Thr Val Gln Lys Leu Ala Ser Asp His Lys
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Asp Ile His Ser Ser Val Ser Arg Val Gly Lys Ala Ile Asp Lys Asn
85 90 95
Phe Asp Ser Asp Ile Ser Ser Val Gly Ile Asp Gly Cys Trp Gln Ala
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Asp Ser Gln Arg Leu Leu Asn Glu Val Met Val Glu His Phe Phe Arg
115 120 125
Gln Gly Met Leu Asp Val Ala Glu Glu Leu Cys Gln Glu Ser Gly Leu
130 135 140
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145 150 155 160
Leu Glu Ala Leu Lys Val Arg Val Leu Arg Pro Ala Leu Glu Trp Ala
165 170 175
Val Ser Asn Arg Glu Met Leu Ile Ala Gln Asn Ser Ser Leu Glu Phe
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Lys Leu His Arg Leu Tyr Phe Ile Ser Leu Leu Met Gly Gly Thr Thr
195 200 205
Asn Gln Arg Glu Ala Leu Gln Tyr Ala Lys Asn Phe Gln Pro Phe Ala
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Leu Asn His Gln Lys Asp Ile Gln Val Leu Met Gly Ser Leu Val Tyr
225 230 235 240
Leu Arg Gln Gly Ile Glu Asn Ser Pro Tyr Val His Leu Leu Asp Ala
245 250 255
Asn Gln Trp Ala Asp Ile Cys Asp Ile Phe Thr Arg Asp Ala Cys Ala
260 265 270
Leu Leu Gly Leu Ser Val Glu Ser Pro Leu Ser Val Ser Phe Ser Ala
275 280 285
Gly Cys Val Ala Leu Pro Ala Leu Ile Asn Ile Lys Ala Val Ile Glu
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Gln Arg Gln Cys Thr Gly Val Trp Asn Gln Lys Asp Glu Leu Pro Ile
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Glu Val Asp Leu Gly Lys Lys Cys Trp Tyr His Ser Ile Phe Ala Cys
325 330 335
Pro Ile Leu Arg Gln Gln Thr Thr Asp Asn Asn Pro Pro Met Lys Leu
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Val Cys Gly His Ile Ile Ser Arg Asp Ala Leu Asn Lys Met Phe Asn
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09629469-072800

<210> 15940
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (77).. (1915)

<400> 15940

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09629469.072800

<210> 15941
 <211> 613
 <212> PRT
 <213> Homo sapiens

<400> 15941

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Val	His	Gln	Val	Ala	Asn	Ser	Gln	Asp	Gln	Val	Leu	Glu	Ala	Glu	Pro
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Arg	Lys	Pro	Val	Arg	Leu	Glu	Ser	Ala	Glu	Arg	Leu	Ala	Glu	Ala	Val
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Gln	Glu	Arg	Gln	Gln	Tyr	Ala	Trp	Leu	Cys	Ser	Gln	Leu	Arg	Arg	Lys
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Ala	Arg	Leu	Gly	Ser	Val	Ser	Leu	Asp	Leu	Cys	Asp	Gly	Asp	Thr	Gly
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Glu	Pro	Arg	Tyr	Thr	Leu	His	Val	Val	Asp	Ser	Pro	Thr	Val	Lys	Pro
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Ser	Arg	Asp	Asn	His	Phe	Ala	Ile	Phe	Ile	Ile	Pro	Gln	Gly	Arg	Glu
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Thr	Glu	Trp	Leu	Phe	Gly	Met	Asp	Glu	Gly	Arg	Lys	Gln	Leu	Ala	Ala
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Ser	Ala	Gly	Phe	Arg	Arg	Leu	Ile	Thr	Val	Ala	Leu	His	Arg	Gly	Gln
				245					250					255	
Gln	Tyr	Glu	Ser	Met	Asp	His	Ile	Gln	Ala	Glu	Leu	Ser	Ala	Arg	Val
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008240"69462960

-9935/13211-

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Asp Leu Pro Ala Ala Pro Gly Gln Ser Ile Asp Lys Ser Tyr Leu Cys
370 375 380
Cys Glu His His Lys Ala Met Ile Ala Gly Leu Ala Leu Leu Arg Asn
385 390 395 400
Pro Glu Leu Leu Leu Glu Ile Pro Leu Ala Leu Leu Val Val Gly Leu
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Gly Gly Gly Ser Leu Pro Leu Phe Val His Asp His Phe Pro Lys Ser
420 425 430
Cys Ile Asp Ala Val Glu Ile Asp Pro Ser Met Leu Glu Val Ala Thr
435 440 445
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450 455 460
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Pro Cys Tyr Asp Val Ile Met Phe Asp Val Asp Ser Lys Asp Pro Thr
485 490 495
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565 570 575
Pro Glu Leu Leu Glu Thr Ala Gln Ala Leu Glu Arg Thr Leu Arg Lys
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<210> 15942

<211> 1475

<212> DNA

<213> Homo sapiens

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<221> CDS

<222> (41).. (1393)

<400> 15942

008210" 69462960

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<210> 15943
 <211> 451
 <212> PRT
 <213> Homo sapiens

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<400> 15943
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        35           40           45
Val Ser Gly Gly Gly Gly Gly Gly Gly Ala Gly Ala Gly Gly Cys Gly
        50           55           60
Gly Pro Gly Gly Ala Leu Thr Arg Arg Ala Val Thr Leu Arg Val Leu
        65           70           75           80
Leu Lys Asp Ala Leu Leu Glu Pro Gly Ala Gly Val Leu Ser Ile Tyr
          85           90           95
Tyr Leu Gly Lys Lys Phe Leu Gly Asp Leu Gln Pro Asp Gly Arg Ile
        100           105           110
Met Trp Gln Glu Thr Gly Gln Thr Phe Asn Ser Pro Ser Ala Trp Ala

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003240"69462960

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Thr Trp Leu Arg Leu His Gln	Leu His Thr Pro Ala Thr Ala Ala Asp	
165	170	175
Glu Ser Pro Ala Ser Glu Gly	Glu Glu Glu Glu Leu Leu Met Glu Glu	
180	185	190
Lys Glu Glu Asp Val Leu Ala	Gly Val Ser Ala Glu Asp Lys Ser Arg	
195	200	205
Arg Pro Leu Gly Lys Ser Pro	Ser Glu Pro Ala His Pro Glu Ala Thr	
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Thr Pro Gly Lys Arg Val Asp	Ser Lys Ile Arg Val Pro Val Arg Tyr	
225	230	235
Cys Met Leu Gly Ser Arg Asp	Leu Ala Arg Asn Pro His Thr Leu Val	
245	250	255
Glu Val Thr Ser Phe Ala Ala	Ile Asn Lys Phe Gln Pro Phe Asn Val	
260	265	270
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275	280	285
Leu Arg Gly Leu Ser Leu Val	Gly Trp Tyr His Ser His Pro His Ser	
290	295	300
Pro Ala Leu Pro Ser Leu Gln	Asp Ile Asp Ala Gln Met Asp Tyr Gln	
305	310	315
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Leu Cys Ser Pro Tyr Tyr Ser	Gly Asn Pro Gly Pro Glu Ser Lys Ile	
340	345	350
Ser Pro Phe Trp Val Met Pro	Pro Pro Glu Gln Arg Pro Ser Asp Tyr	
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Gly Ile Pro Met Asp Val Glu	Met Ala Tyr Val Gln Asp Ser Phe Leu	
370	375	380
Thr Asn Asp Ile Leu His Glu	Met Met Leu Leu Val Glu Phe Tyr Lys	
385	390	395
Gly Ser Pro Asp Leu Val Arg	Leu Gln Glu Pro Trp Ser Gln Glu His	
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<211> 3383

<212> DNA

009629469-072800

<213> Homo sapiens

<220>

<221> CDS

<222> (107).. (448)

<400> 15944

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<210> 15945
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 <212> PRT
 <213> Homo sapiens

<400> 15945

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			20					25					30		
Ile	His	Arg	His	Leu	Lys	Thr	Arg	Thr	Thr	Ser	His	Gly	Arg	Val	Gly
			35				40					45			
Ala	Thr	Ala	Ala	Val	Tyr	Ser	Ala	Ala	Ile	Leu	Glu	Tyr	Leu	Thr	Ala
			50				55				60				
Glu	Val	Leu	Glu	Leu	Ala	Gly	Asn	Ala	Ser	Lys	Asp	Leu	Lys	Val	Lys
			65			70				75				80	
Arg	Ile	Thr	Pro	Arg	His	Leu	Gln	Leu	Ala	Ile	Arg	Gly	Asp	Glu	Glu
				85					90					95	
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Cys	Ser														

<210> 15946
 <211> 1837
 <212> DNA
 <213> Homo sapiens

<220>

008240"69462960

<221> CDS
<222> (115).. (528)

<400> 15946

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<210> 15947
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<212> PRT
<213> Homo sapiens

<400> 15947

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          20             25             30
Pro Val Arg Thr Glu Thr Ala Met Pro Arg Leu Gly Ala Phe Phe Leu

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09625469-072800

<210> 15948
<211> 1750
<212> DNA
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 15949

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			20					25					30		
Glu	Leu	Pro	Val	Val	Val	Lys	Glu	Leu	Pro	Glu	Gly	Trp	Ser	Leu	Pro
		35				40						45			
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	50				55					60					
Val	Thr	Leu	Trp	Arg	Arg	Leu	Ala	Pro	Gly	Lys	Asp	Glu	Gln	Val	Pro
65				70					75					80	
Ile	Arg	Val	Val	Gln	Val	Leu	Gly	Met	Val	Gly	Thr	Ala	Leu	Leu	Ala
			85					90						95	
Ser	Leu	Trp	His	His	Val	Ala	Pro	Val	Ala	Gly	Gln	Leu	His	Ser	Val
			100				105						110		
Ala	Phe	Leu	Ala	Leu	Ala	Phe	Val	Leu	Ala	Leu	Ala	Cys	Cys	Ala	Ser
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Asn	Val	Thr	Phe	Leu	Pro	Phe	Leu	Ser	His	Leu	Pro	Pro	Arg	Phe	Leu
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		180					185						190		
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	195					200						205			
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	210				215				220						
Pro	Thr	Gly	Glu	Leu	Gly	Ser	Gly	Leu	Gln	Val	Gly	Ala	Pro	Gly	Ala
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Glu	Glu	Glu	Val	Glu	Glu	Ser	Ser	Pro	Leu	Gln	Glu	Pro	Pro	Ser	Gln
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09629469.072800

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<210> 15950
<211> 2894
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (872)..(1477)

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		195					200					205			
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225					230					235					240
His	Val	Gly	Glu	Leu	Ile	Ile	Trp	Asp	Ala	Leu	Asp	Trp	Thr	Met	Gln
				245					250					255	
Ala	Tyr	Glu	Arg	Asn	Phe	Trp	Asp	Pro	Ser	Pro	Gln	Leu	Asp	Thr	Gln
			260					265					270		
Gln	Glu	Ile	Lys	Leu	Cys	Gln	Lys	Ser	Asn	Asp	Ile	Ser	Ile	His	His
		275					280					285			
Phe	Thr	Cys	Asp	Glu	Glu	Asn	Val	Phe	Ala	Ala	Val	Gly	Arg	Gly	Leu
	290					295					300				
Tyr	Val	Tyr	Ser	Leu	Gln	Met	Lys	Arg	Val	Ile	Ala	Cys	Gln	Lys	Thr
305					310					315					320
Ala	His	Asp	Ser	Asn	Val	Leu	His	Ile	Ala	Arg	Leu	Pro	Asn	Arg	Gln
				325					330					335	
Leu	Ile	Ser	Cys	Ser	Glu	Asp	Gly	Ser	Val	Arg	Ile	Trp	Glu	Leu	Arg

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				340					345					350					
Glu	Lys	Gln	Gln	Leu	Ala	Ala	Glu	Pro	Val	Pro	Thr	Gly	Phe	Phe	Asn				
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Met	Trp	Gly	Phe	Gly	Arg	Val	Ser	Lys	Gln	Ala	Ser	Gln	Pro	Val	Lys				
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Lys	Gln	Gln	Glu	Asn	Ala	Thr	Ser	Cys	Ser	Leu	Glu	Leu	Ile	Gly	Asp				
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Leu	Ile	Gly	His	Ser	Ser	Ser	Val	Glu	Met	Phe	Leu	Tyr	Phe	Glu	Asp				
			405					410						415					
His	Gly	Leu	Val	Thr	Cys	Ser	Ala	Asp	His	Leu	Ile	Ile	Leu	Trp	Lys				
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Asn	Gly	Glu	Arg	Glu	Ser	Gly	Leu	Arg	Ser	Leu	Arg	Leu	Phe	Gln	Lys				
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (11).. (346)

<400> 15956

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agaacgtgat gacatcgaca tgttgaaaga actggggagt ctcaccacgg ctaatttgat 240
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 <212> PRT
 <213> Homo sapiens

<400> 15957

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			20					25					30		
Pro	Gly	Val	Ala	Glu	Phe	Ala	Ala	Ser	Phe	Lys	Ser	Pro	Ile	Thr	Ser
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Ser	Pro	Pro	Lys	Trp	Met	Ala	Glu	Ile	Glu	Arg	Asp	Asp	Ile	Asp	Met
	50					55				60					
Leu	Lys	Glu	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Asn	Leu	Met	Glu	Lys	Val
65					70					75					80
Arg	Gly	Leu	Gln	Asn	Leu	Ala	Tyr	Gln	Leu	Gly	Leu	Asp	Glu	Ser	Arg
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Glu	Met	Thr	Arg	Gly	Lys	Phe	Leu	Asn	Ile	Leu	Glu	Lys	Pro	Lys	Lys
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 <212> DNA
 <213> Homo sapiens

<220>
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<400> 15958

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agaagagcac cgacgcagac ctggccatgt caaaatctgc cgtgaagata tccttggact 240
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009220"69462960

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agaggcggga acaggccttg caggactaca ggaggctgca ggccaaggtg gagaagtatg 480
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tttcaatg 1508

<210> 15959
<211> 253
<212> PRT
<213> Homo sapiens

<400> 15959
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Gln Leu Glu Glu Gln Thr Arg Arg Leu Gln Lys Asp Met Lys Lys Ser
35 40 45
Thr Asp Ala Asp Leu Ala Met Ser Lys Ser Ala Val Lys Ile Ser Leu
50 55 60
Asp Leu Leu Ser Asn Pro Leu Cys Glu Gln Asp Gln Asp Leu Leu Asn
65 70 75 80
Met Val Thr Ala Leu Asp Thr Ala Met Lys Arg Met Asp Ala Phe Asn
85 90 95
Gln Glu Lys Val Asn Gln Ile Gln Lys Thr Val Ile Glu Pro Leu Lys
100 105 110
Lys Phe Gly Ser Val Phe Pro Ser Leu Asn Met Ala Val Lys Arg Arg
115 120 125
Glu Gln Ala Leu Gln Asp Tyr Arg Arg Leu Gln Ala Lys Val Glu Lys
130 135 140
Tyr Glu Glu Lys Glu Lys Thr Gly Pro Val Leu Ala Lys Leu His Gln

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145		150		155		160
Ala Arg Glu Glu Leu Arg Pro Val Arg Glu Asp Phe Glu Ala Lys Asn						
	165		170		175	
Arg Gln Leu Leu Glu Glu Met Pro Arg Phe Tyr Gly Ser Arg Leu Asp						
	180		185		190	
Tyr Phe Gln Pro Ser Phe Glu Ser Leu Ile Arg Ala Gln Val Val Tyr						
	195		200		205	
Tyr Ser Glu Met His Lys Ile Phe Gly Asp Leu Ser His Gln Leu Asp						
	210		215		220	
Gln Pro Gly His Ser Asp Glu Gln Arg Glu Arg Glu Asn Glu Ala Lys						
225		230		235		240
Leu Ser Glu Leu Arg Ala Leu Ser Ile Val Ala Asp Asp						
	245		250			

<210> 15960
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (28).. (459)

<400> 15960

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gtttagtca	ccgatcttga	ggaattgcaa	gacttgctga	agatgaatat	taatatgaac	360
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tccacccgac	ttcatactga	tggccgactg	catatactat	gaagagtctt	tggagccatt	480
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atattgtctt	gtatacttat	attggccaaa	gttttctttt	cctccaccat	acatgtctat	1320
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<210> 15961
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 15961
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 35 40 45
 Leu Ser Lys Tyr Leu Glu Thr Pro Glu Phe Ser Gly Asp Gly Ala His
 50 55 60
 Ala Leu Ser Arg Arg Ser Val Leu Glu Leu Gly Ser Gly Thr Gly Ala
 65 70 75 80
 Val Gly Leu Met Ala Ala Thr Leu Gly Ala Asp Val Val Val Thr Asp
 85 90 95
 Leu Glu Glu Leu Gln Asp Leu Leu Lys Met Asn Ile Asn Met Asn Lys
 100 105 110
 His Leu Val Thr Gly Ser Val Gln Ala Lys Gly Gly Arg Asn Arg Arg
 115 120 125
 Leu Ser Phe Ser Thr Arg Leu His Thr Asp Gly Arg Leu His Ile Leu
 130 135 140

<210> 15962
 <211> 1487
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (47).. (1165)

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 <212> PRT
 <213> Homo sapiens

<400> 15963

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			20					25					30		
Pro	Val	Gly	Phe	Cys	Leu	Leu	Val	Leu	Arg	Leu	Phe	Leu	Gly	Ile	His
			35				40					45			
Val	Phe	Leu	Val	Ser	Cys	Ala	Leu	Pro	Asp	Ser	Val	Leu	Arg	Arg	Phe
			50			55				60					
Val	Val	Arg	Thr	Met	Cys	Ala	Val	Leu	Gly	Leu	Val	Ala	Arg	Gln	Glu
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Asp	Ser	Gly	Leu	Arg	Asp	His	Ser	Val	Arg	Val	Leu	Ile	Ser	Asn	His
				85				90						95	
Val	Thr	Pro	Phe	Asp	His	Asn	Ile	Val	Asn	Leu	Leu	Thr	Thr	Cys	Ser
			100					105					110		
Thr	Pro	Leu	Leu	Asn	Ser	Pro	Pro	Ser	Phe	Val	Cys	Trp	Ser	Arg	Gly
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Phe	Met	Glu	Met	Asn	Gly	Arg	Gly	Glu	Leu	Val	Glu	Ser	Leu	Lys	Arg
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 165 170 175
 Trp Pro Phe Ser Ile Gln Asp Val Val Gln Pro Leu Thr Leu Gln Val
 180 185 190
 Gln Arg Pro Leu Val Ser Val Thr Val Ser Asp Ala Ser Trp Val Ser
 195 200 205
 Glu Leu Leu Trp Ser Leu Phe Val Pro Phe Thr Val Tyr Gln Val Arg
 210 215 220
 Trp Leu Arg Pro Val His Arg Gln Leu Gly Glu Ala Asn Glu Glu Phe
 225 230 235 240
 Ala Leu Arg Val Gln Gln Leu Val Ala Lys Glu Leu Gly Gln Thr Gly
 245 250 255
 Thr Arg Leu Thr Pro Ala Asp Lys Ala Glu His Met Lys Arg Gln Arg
 260 265 270
 His Pro Arg Leu Arg Pro Gln Ser Ala Gln Ser Ser Phe Pro Pro Ser
 275 280 285
 Pro Gly Pro Ser Pro Asp Val Gln Leu Ala Thr Leu Ala Gln Arg Val
 290 295 300
 Lys Glu Val Leu Pro His Val Pro Leu Gly Val Ile Gln Arg Asp Leu
 305 310 315 320
 Ala Lys Thr Gly Cys Val Asp Leu Thr Ile Thr Asn Leu Leu Glu Gly
 325 330 335
 Ala Val Ala Phe Met Pro Glu Asp Ile Thr Lys Gly Thr Gln Ser Leu
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<210> 15964
 <211> 1609
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (574).. (1299)

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 ttgccacggg cttgaaacca agataccatt ttgctgcttt ggaaaagacc tattatgaga 300
 ggcttcata tcgaaacat atcattctac aggaaaatgc acagcatgcc acccggttta 360

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 <212> PRT
 <213> Homo sapiens

<400> 15965
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 35 40 45
 Ile Gly Thr His Cys Tyr Leu Ala Leu Ala Lys Gly Gly Leu Ser Asp
 50 55 60
 Asp His Val Leu Ile Leu Pro Ile Gly His Tyr Gln Ser Val Val Glu
 65 70 75 80
 Leu Ser Ala Glu Val Val Glu Glu Val Glu Lys Tyr Lys Ala Thr Leu
 85 90 95
 Arg Arg Phe Phe Lys Ser Arg Gly Lys Trp Cys Val Val Phe Glu Arg
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 Asn Tyr Lys Ser His His Leu Gln Leu Gln Val Ile Pro Val Pro Ile
 115 120 125
 Ser Cys Ser Thr Thr Asp Asp Ile Lys Asp Ala Phe Ile Thr Gln Ala
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<400> 15967

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Pro	Ser	Pro	Pro	Pro	Arg	Arg	Cys	Ala	His	Gln	Ala	Val	Val	Val	Pro	115	120	125	
Gln	Gly	Gly	Gly	Gln	Leu	Trp	Val	Phe	Gly	Gly	Glu	Phe	Ala	Ser	Pro	130	135	140	
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Tyr	Ala	Phe	Asn	Leu	Asp	Thr	Phe	Thr	Trp	Ser	Lys	Leu	Ser	Pro	Ser	210	215	220	
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325 330 335
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Glu Lys Lys Lys Arg Arg Arg Gly Arg Lys Glu Glu Pro Glu Gly Gly
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Ser Arg Pro Ala Cys Gly Gly Ala Gly Thr Gln Gly Pro Val Gln Leu
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Val Lys Glu Val Val Ala Glu Asp Gly Thr Val Val Thr Ile Lys Gln
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Ser Asn Ala Met Leu Ala Val Lys His Gly Val Leu Tyr Val Tyr Gly
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Gly Met Phe Glu Ala Gly Asp Arg Gln Val Thr Leu Ser Asp Leu His
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Cys Leu Asp Leu His Arg Met Glu Ala Trp Lys Ala Leu Val Glu Met
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<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (123).. (2090)

<400> 15968

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<211> 656

<212> PRT

<213> Homo sapiens

<400> 15969

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Ile	Asn	Lys	Glu	Leu	Ala	Asn	Ile	Arg	Ser	Lys	Phe	Lys	Gly	Asp	Lys
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Ser	Leu	Ile	Thr	Thr	Leu	Ala	Gln	Lys	Asn	Pro	Glu	Glu	Phe	Lys	Thr
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Phe Leu Gln His Arg	Glu Thr Asn Leu Arg Tyr	Leu Ala Leu Glu Ser
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Met Cys Thr Leu Ala	Ser Ser Glu Phe Ser His	Glu Ala Val Lys Thr
355	360	365
His Ile Glu Thr Val	Ile Asn Ala Leu Lys Thr	Glu Arg Asp Val Ser
370	375	380
Val Arg Gln Arg Ala	Val Asp Leu Leu Tyr Ala	Met Cys Asp Arg Ser
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Asn Ala Pro Gln Ile	Val Ala Glu Met Leu	Ser Tyr Leu Glu Thr Ala
405	410	415
Asp Tyr Ser Ile Arg	Glu Glu Ile Val Leu	Lys Val Ala Ile Leu Ala
420	425	430
Glu Lys Tyr Ala Val	Asp Tyr Thr Trp Tyr	Val Asp Thr Ile Leu Asn
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Val Lys Val Gly Gly	Tyr Ile Leu Gly Glu	Phe Gly Asn Leu Ile Ala
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Gly Asp Pro Arg Ser	Ser Pro Leu Ile Gln	Phe His Leu Leu His Ser
515	520	525
Lys Phe His Leu Cys	Ser Val Pro Thr Arg	Ala Leu Leu Leu Ser Thr
530	535	540
Tyr Ile Lys Phe Val	Asn Leu Phe Pro Glu	Val Lys Pro Thr Ile Gln
545	550	555
Asp Val Leu Arg Ser	Asp Ser Gln Leu Arg	Asn Ala Asp Val Glu Leu
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Gln Gln Arg Ala Val	Glu Tyr Leu Arg Leu	Ser Thr Val Ala Ser Thr
580	585	590
Asp Ile Leu Ala Thr	Val Leu Glu Glu Met	Pro Pro Phe Pro Glu Arg
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Glu Ser Ser Ile Leu	Ala Lys Leu Lys Lys	Lys Lys Gly Pro Ser Thr
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<213> Homo sapiens

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<222> (37).. (1494)

<400> 15970

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<400> 15971

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Lys	Val	Ser	Glu	Ile	Lys	Lys	Lys	Ile	Lys	Ser	Ile	Leu	Pro	Gly	Arg
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Ser	Cys	Asp	Leu	Leu	Gln	Asp	Thr	Ser	His	Leu	Pro	Pro	Glu	His	Ser
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Val	Glu	Arg	Asp	His	Thr	Tyr	Ser	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val
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Gly	Glu	Gly	Pro	Pro	Gly	Thr	Leu	Gln	Gly	Thr	Lys	Leu	Pro	Val	Glu
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Pro	Arg	Lys	Arg	Tyr	Val	Tyr	Val	Trp	His	Cys	Pro	Gln	Gly	Pro	Gly
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Leu	Glu	Thr	Pro	Leu	Val	Ala	Asp	Thr	Ser	Gly	Ala	Tyr	Phe	Arg	Arg
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Glu Glu Pro Asp Pro Ala Asn Leu Glu Val Asp His Asp Phe Phe Gln
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 Asp Lys Val Trp Pro His Leu Ala Leu Arg Val Pro Ala Phe Glu Thr
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 405 410 415
 Asp Gln Asn Gly Val Val Gly Pro His Pro Leu Val Val Asn Met Tyr
 420 425 430
 Phe Ala Thr Gly Phe Ser Gly His Gly Leu Gln Gln Ala Pro Gly Ile
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 Gly Arg Ala Val Ala Glu Met Val Leu Lys Gly Arg Phe Gln Thr Ile
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<220>
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 <213> Homo sapiens

<400> 15973

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			20					25					30		
Ser	Phe	Glu	Cys	Arg	Ala	Cys	Ser	Lys	Val	Phe	Val	Lys	Ser	Ser	Asp
		35					40					45			
Leu	Leu	Lys	His	Leu	Arg	Thr	His	Thr	Gly	Glu	Arg	Pro	Tyr	Glu	Cys
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	65				70					75				80	
Gln	Arg	Ile	His	Ser	Gly	Glu	Thr	Pro	Tyr	Ala	Cys	Pro	Val	Cys	Gly
			85					90						95	
Lys	Ala	Phe	Arg	His	Ser	Ser	Ser	Leu	Val	Arg	His	Gln	Arg	Ile	His
			100					105					110		
Thr	Ala	Glu	Lys	Ser	Phe	Arg	Cys	Ser	Glu	Cys	Gly	Lys	Ala	Phe	Ser
		115					120					125			
His	Gly	Ser	Asn	Leu	Ser	Gln	His	Arg	Lys	Ile	His	Ala	Gly	Gly	Arg
	130					135					140				
Pro	Tyr	Ala	Cys	Ala	Gln	Cys	Gly	Arg	Arg	Phe	Cys	Arg	Asn	Ser	His
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			180					185					190				
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		195					200					205					
Arg	Ala	Phe	Ser	His	Ser	Ser	Asn	Leu	Thr	Gln	His	Gln	Leu	Leu	His		
	210					215					220						
Thr	Gly	Glu	Arg	Pro	Phe	Arg	Cys	Val	Asp	Cys	Gly	Lys	Ala	Phe	Ala		
225					230					235					240		
Lys	Gly	Ala	Val	Leu	Leu	Ser	His	Arg	Arg	Ile	His	Thr	Gly	Glu	Lys		
			245					250						255			
Pro	Phe	Val	Cys	Thr	Gln	Cys	Gly	Arg	Ala	Phe	Arg	Glu	Arg	Pro	Ala		
		260						265					270				
Leu	Phe	His	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Thr	Val	Arg	Arg		
	275					280						285					
Ser	Arg	Ala	Ser	Leu	His	Pro	Gln	Ala	Arg	Ser	Val	Ala	Gly	Ala	Ser		
	290					295					300						
Ser	Glu	Gly	Ala	Pro	Ala	Lys	Glu	Thr	Glu	Pro	Thr	Pro	Ala	Ser	Gly		
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (60).. (1142)

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 <212> PRT
 <213> Homo sapiens

<400> 15975

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			20					25					30		
Gln	Ser	Ile	Tyr	Glu	Lys	Glu	Arg	Ile	Ala	His	Ala	Lys	Gln	Ile	Ile
		35					40					45			
Lys	Pro	Phe	Ile	Leu	Arg	Arg	Val	Lys	Glu	Glu	Val	Leu	Lys	Gln	Leu
	50					55					60				
Pro	Pro	Lys	Lys	Asp	Arg	Ile	Glu	Leu	Cys	Ala	Met	Ser	Glu	Lys	Gln
	65				70					75					80
Glu	Gln	Leu	Tyr	Leu	Gly	Leu	Phe	Asn	Arg	Leu	Lys	Lys	Ser	Ile	Asn
				85					90					95	
Asn	Leu	Val	Thr	Glu	Lys	Asn	Thr	Glu	Met	Cys	Asn	Val	Met	Met	Gln
			100					105					110		
Leu	Arg	Lys	Met	Ala	Asn	His	Pro	Leu	Leu	His	Arg	Gln	Tyr	Tyr	Thr
	115						120					125			
Ala	Glu	Lys	Leu	Lys	Glu	Met	Ser	Gln	Leu	Met	Leu	Lys	Glu	Pro	Thr
	130					135					140				
His	Cys	Glu	Ala	Asn	Pro	Asp	Leu	Ile	Phe	Glu	Asp	Met	Glu	Val	Met
145					150					155					160
Thr	Asp	Phe	Glu	Leu	His	Val	Leu	Cys	Lys	Gln	Tyr	Arg	His	Ile	Asn
			165						170					175	
Asn	Phe	Gln	Leu	Asp	Met	Asp	Leu	Ile	Leu	Asp	Ser	Gly	Lys	Phe	Arg
			180					185					190		
Val	Leu	Gly	Cys	Ile	Leu	Ser	Glu	Leu	Lys	Gln	Lys	Gly	Asp	Arg	Val
		195					200					205			
Val	Leu	Phe	Ser	Gln	Phe	Thr	Met	Met	Leu	Asp	Ile	Leu	Glu	Val	Leu
	210					215					220				
Leu	Lys	His	His	Gln	His	Arg	Tyr	Leu	Arg	Leu	Asp	Gly	Lys	Thr	Gln

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225		230		235		240
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	245	250	255			
Ile Phe Val Phe	Leu Leu Ser Thr	Lys Ala Gly Gly	Leu Gly Ile Asp			
	260	265	270			
Leu Thr Ser Ala	Asn Val Val Ile	Leu His Asp Ile	Asp Cys Asn Pro			
	275	280	285			
Tyr Asn Asp Lys	Gln Ala Glu Asp	Arg Cys His Arg	Val Gly Gln Thr			
	290	295	300			
Lys Glu Val Leu	Val Ile Lys Leu	Ile Ser Gln Gly	Thr Ile Glu Glu			
305	310	315	320			
Ser Met Leu Lys	Ile Asn Gln Gln	Lys Leu Lys Leu	Glu Gln Asp Met			
	325	330	335			
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 <212> DNA
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<211> 259

<212> PRT

<213> Homo sapiens

<400> 15977

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      35      40      45
Glu Ser His Leu Ser Leu Gly Arg Lys Leu Leu Arg Leu Gly Asn Ser
      50      55      60
Ala Asp Ala Leu Glu Ser Ala Lys Arg Ala Val His Leu Ser Asp Val
      65      70      75      80
Val Leu Arg Phe Cys Ile Thr Val Ser His Leu Asn Arg Ala Leu Tyr
      85      90      95
Phe Ala Cys Asp Asn Val Leu Trp Ala Gly Lys Ser Gly Leu Ala Pro
      100      105      110
Arg Val Asp Gln Glu Lys Trp Ala Gln Arg Ser Phe Arg Tyr Tyr Leu
      115      120      125
Phe Ser Leu Ile Met Asn Leu Ser Arg Asp Ala Tyr Glu Ile Arg Leu
      130      135      140
Leu Met Glu Gln Glu Ser Ser Ala Cys Ser Arg Arg Leu Lys Gly Ser
      145      150      155      160
Gly Gly Gly Val Pro Gly Gly Ser Glu Thr Gly Gly Leu Gly Gly Pro
      165      170      175
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      180      185      190
Gln Val Leu Leu Leu Ala Arg Val Leu Arg Gly His Pro Pro Leu Leu
      195      200      205
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      210      215      220
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009270-69462960

Leu Lys Pro

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<211> 587

<212> PRT

<213> Homo sapiens

<400> 15979

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Phe	Gln	His	Phe	Leu	Lys	Ser	Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser
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Asn	Pro	Gly	Leu	Arg	Val	Arg	Ala	Gln	Pro	Gly	Asp	Tyr	Val	Leu
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Lys	Ile	Thr	Ser	Ala	Ser	Ser	Gln	Thr	Leu	Lys	Gly	His	Val	Leu
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<211> 2007

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (195).. (1403)

<400> 15980

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09629469 072800

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ala Arg Ile Thr Ile Ser Glu Gly Ser Cys Pro Glu Arg Ile Thr Thr

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Phe Lys Leu Asp Glu Asp Leu Cys Ala Ala Pro Ala Asn Gly Gly Asn				80
	85		90	95
Val Ser Arg Pro Pro Val Thr Leu Arg Leu Val Ile Pro Ala Ser Gln				
	100		105	110
Cys Gly Ser Leu Ile Gly Lys Ala Gly Thr Lys Ile Lys Glu Ile Arg				
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Glu Thr Thr Gly Ala Gln Val Gln Val Ala Gly Asp Leu Leu Pro Asn				
	130		135	140
Ser Thr Glu Arg Ala Val Thr Val Ser Gly Val Pro Asp Ala Ile Ile				
145		150		155
Leu Cys Val Arg Gln Ile Cys Ala Val Ile Leu Glu Ser Pro Pro Lys				160
	165		170	175
Gly Ala Thr Ile Pro Tyr His Pro Ser Leu Ser Leu Gly Thr Val Leu				
	180		185	190
Leu Ser Ala Asn Gln Gly Phe Ser Val Gln Gly Gln Tyr Gly Ala Val				
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Thr Pro Ala Glu Val Thr Lys Leu Gln Gln Leu Ser Ser His Ala Val				
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Pro Phe Ala Thr Pro Ser Val Val Pro Gly Leu Asp Pro Gly Thr Gln				
225		230		235
Thr Ser Ser Gln Glu Phe Leu Val Pro Asn Asp Leu Ile Gly Cys Val				
	245		250	255
Ile Gly Arg Gln Gly Ser Lys Ile Ser Glu Ile Arg Gln Met Ser Gly				
	260		265	270
Ala His Ile Lys Ile Gly Asn Gln Ala Glu Gly Ala Gly Glu Arg His				
	275		280	285
Val Thr Ile Thr Gly Ser Pro Val Ser Ile Ala Leu Ala Gln Tyr Leu				
	290		295	300
Ile Thr Ala Cys Leu Glu Thr Ala Lys Ser Thr Ser Gly Gly Thr Pro				
305		310		315
Ser Ser Ala Pro Ala Asp Leu Pro Ala Pro Phe Ser Pro Pro Leu Thr				
	325		330	335
Ala Leu Pro Thr Ala Pro Pro Gly Leu Leu Gly Thr Pro Tyr Ala Ile				
	340		345	350
Ser Leu Ser Asn Phe Ile Gly Leu Lys Pro Met Pro Phe Leu Ala Leu				
	355		360	365
Pro Pro Ala Ser Pro Gly Pro Pro Pro Gly Leu Ala Ala Tyr Thr Ala				
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Ser Pro Tyr				400

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<213> Homo sapiens

<220>
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<222> (175).. (948)

<400> 15982

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<212> PRT
<213> Homo sapiens

<400> 15983

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002270.59452960

-9982/13211-

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485 490 495
Pro Leu Trp Met Asp Gln Leu Cys Thr Gly Cys Met Lys Thr Pro Phe
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Leu Gly Asp Met Ala His Ile Arg
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<212> DNA
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<222> (132).. (740)

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 <213> Homo sapiens

<400> 15987

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<210> 15988

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<211> 1642
<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (60).. (1367)

<400> 15988

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<210> 15989
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<400> 15989

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-9985/13211-

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Val Ala Lys Glu Leu Gln Phe Asn Tyr Ile Pro Val Asp Ala Glu Ile
65 70 75 80
Val Ser Ile Asp Thr Phe Asn Lys Ser Pro Pro Lys Arg Gly Leu Val
85 90 95
Val Gly Ile Thr Phe Ile Lys Asp Ser Gly Asp Lys Gly Ser Pro Phe
100 105 110
Leu Asn Ile Tyr Cys Asp Tyr Glu Pro Gly Ser Glu Tyr Asn Leu Asp
115 120 125
Ser Ile Ala Gln Ser Cys Leu Asn Leu Glu Leu Gln Phe Thr Pro Phe
130 135 140
Gln Leu Cys His Ala Glu Val Gln Val Gly Asp Gln Leu Glu Thr Val
145 150 155 160
Phe Leu Leu Ser Gly Asn Asp Pro Ala Ile His Leu Tyr Lys Glu Asn
165 170 175
Glu Gly Leu His Gln Phe Glu Glu Gln Pro Val Glu Asn Leu Phe Pro
180 185 190
Glu Leu Thr Asn Leu Thr Ser Ser Val Leu Trp Leu Asp Val His Asn
195 200 205
Phe Pro Gly Thr Ser Arg Arg Leu Ser Ala Leu Gly Cys Gln Ser Gly
210 215 220
Tyr Val Arg Val Ala His Val Asp Gln Arg Ser Arg Glu Val Leu Gln
225 230 235 240
Met Trp Ser Val Leu Gln Asp Gly Pro Ile Ser Arg Val Ile Val Phe
245 250 255
Ser Leu Ser Ala Ala Lys Glu Thr Lys Asp Arg Pro Leu Gln Asp Glu
260 265 270
Tyr Ser Val Leu Val Ala Ser Met Leu Glu Pro Ala Val Val Tyr Arg
275 280 285
Asp Leu Leu Asn Arg Gly Leu Glu Asp Gln Leu Leu Leu Pro Gly Ser
290 295 300
Asp Gln Phe Asp Ser Val Leu Cys Ser Leu Val Thr Asp Val Asp Leu
305 310 315 320
Asp Gly Arg Pro Glu Val Leu Val Ala Thr Tyr Gly Gln Glu Leu Leu
325 330 335
Cys Tyr Lys Tyr Arg Gly Pro Glu Ser Gly Leu Pro Glu Ala Gln His
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Gly Phe His Leu Leu Trp Gln Arg Ser Phe Ser Ser Pro Leu Leu Ala
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Met Ala His Val Asp Leu Thr Gly Asp Gly Leu Gln Glu Leu Ala Val
370 375 380
Val Ser Leu Lys Gly Val His Ile Leu Gln His Ser Leu Ile Gln Ala
385 390 395 400
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-9986/13211-

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Arg Arg Leu Gln Gly Leu Glu Asp Gly Ala Gly Ala Gly Pro Ala Glu
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Asn Ala Ala Ser
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<210> 15990
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<220>
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<222> (92).. (1030)

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<213> Homo sapiens

<400> 15991

000220"69462960

-9987/13211-

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Ala Tyr Lys Phe His Met Gly Leu Tyr Gly Glu Thr Gly Arg Leu Phe
50 55 60
Thr Glu Ser Cys Ser Ile Ser Pro Lys Leu Arg Ser Ile Ala Val Tyr
65 70 75 80
Tyr Asp Asn Pro His Met Val Pro Pro Asp Lys Cys Arg Cys Ala Val
85 90 95
Gly Ser Ile Leu Ser Glu Gly Glu Glu Ser Pro Ser Pro Glu Leu Ile
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Asp Leu Tyr Gln Lys Phe Gly Phe Lys Val Phe Ser Phe Pro Ala Pro
115 120 125
Ser His Val Val Thr Ala Thr Phe Pro Tyr Thr Thr Ile Leu Ser Ile
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165 170 175
Gln Ile His Phe Met Cys Pro Leu Ala Arg Gln Gly Asp Phe Tyr Val
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225 230 235 240
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260 265 270
Phe Glu Glu Leu Asp Leu Glu Gly Glu Gly Pro Leu Gly Glu Ser Arg
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<210> 15992

<211> 2502

<212> DNA

<213> Homo sapiens

<400> 15992

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (418).. (1002)

<400> 15993

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<212> PRT
<213> Homo sapiens

<400> 15994

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Asp Ile Asn Ser Val His Gly Leu Phe Ala Thr Gly Thr Ile Glu Gly
             35             40             45
Arg Val Glu Cys Trp Asp Pro Arg Thr Arg Asn Arg Val Gly Leu Leu
             50             55             60
Asp Cys Ala Leu Asn Ser Val Thr Ala Asp Ser Glu Ile Asn Ser Leu
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-9990/13211-

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115 120 125
His Phe Gln Asp Ser Leu Asp Leu Ile Leu Ser Ala Asp Ser Arg Ile
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Val Lys Met Trp Asn Lys Asn Ser Gly Lys Ile Phe Thr Ser Leu Glu
145 150 155 160
Pro Glu His Asp Leu Asn Asp Val Cys Leu Tyr Pro Asn Ser Gly Met
165 170 175
Leu Leu Thr Ala Asn Glu Thr Pro Lys Met Gly Ile Tyr Tyr Ile Pro
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Pro Ser Leu
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<212> DNA
<213> Homo sapiens

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<222> (166).. (888)

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<211> 241

<212> PRT

<213> Homo sapiens

<400> 15996

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Thr Gly Lys Glu Asp Ala Ala Asn Asn Tyr Ala Trp Gly His Tyr Thr
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Ile Gly Lys Glu Phe Ile Asp Leu Leu Leu Asp Arg Ile Arg Lys Leu
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Ala Asp Gln Cys Thr Gly Leu Gln Gly Phe Leu Val Phe His Ser Leu
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Gly Arg Gly Thr Gly Ser Asp Val Thr Ser Phe Leu Met Glu Trp Leu
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Ser Val Asn Tyr Gly Lys Lys Ser Lys Leu Gly Phe Ser Ile Tyr Pro
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Ala Pro Gln Val Ser Thr Ala Met Val Gln Pro Tyr Asn Ser Ile Leu
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Thr Thr His Thr Thr Leu Glu His Ser Asp Cys Ala Phe Met Val Asp
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Asn Lys Ala Ile Tyr Asp Ile Cys His Arg Asn Leu Asp Ile Glu Arg
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Pro Thr Tyr Thr Asn Leu Asn Arg Leu Ile Ser Gln Ile Val Ser Ser
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Ile Thr Ala Ser Leu Arg Phe Asp Gly Ala Leu Asn Val Asp Leu Thr
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<210> 15997

<211> 1641

<212> DNA

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<213> Homo sapiens

<220>

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<222> (22).. (1512)

<400> 15997

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<211> 497

<212> PRT

<213> Homo sapiens

<400> 15998

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          20          25          30
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Gly	Arg	Arg	Leu	Pro	Pro	Ala	Phe	Lys	His	Leu	Arg	Val	Val	Ala	Lys				
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Arg	Ala	Gly	Gln	Pro	Pro	His	Val	Leu	Glu	Glu	Gly	Pro	Glu	Ala	Ser				
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 <212> DNA
 <213> Homo sapiens

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 <222> (16).. (1572)

<400> 15999

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<211> 519

<212> PRT

<213> Homo sapiens

<400> 16000

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		20					25					30		Arg
Glu	Glu	Leu	Arg	Leu	Gln	His	Glu	Glu	Asp	Lys	Lys	Ser	Ala	Met
		35					40					45		Ser
Gln	Leu	Leu	Gln	Leu	Lys	Asp	Arg	Glu	Lys	Asn	Ala	Ala	Arg	Asp
	50					55					60			Ser
Trp	Gln	Lys	Lys	Val	Glu	Asp	Leu	Leu	Asn	Gln	Ile	Ser	Leu	Leu
	65				70					75				Lys
Gln	Asn	Leu	Glu	Ile	Gln	Leu	Ser	Gln	Ser	Gln	Thr	Ser	Leu	Gln
				85				90						95
Leu	Gln	Ala	Gln	Phe	Thr	Gln	Glu	Arg	Gln	Arg	Leu	Thr	Gln	Glu
		100						105					110	Leu
Glu	Glu	Leu	Glu	Glu	Gln	His	Gln	Gln	Arg	His	Lys	Ser	Leu	Lys
		115					120					125		Glu
Ala	His	Val	Leu	Ala	Phe	Gln	Thr	Met	Glu	Glu	Glu	Lys	Glu	Lys
	130					135					140			Glu
Gln	Arg	Ala	Leu	Glu	Asn	His	Leu	Gln	Gln	Lys	His	Ser	Ala	Glu
	145				150					155				160
Gln	Ser	Leu	Lys	Asp	Ala	His	Arg	Glu	Ser	Met	Glu	Gly	Phe	Arg
			165					170					175	Ile
Glu	Met	Glu	Gln	Glu	Leu	Gln	Thr	Leu	Arg	Phe	Glu	Leu	Glu	Asp
		180						185					190	Glu
Gly	Lys	Ala	Met	Leu	Ala	Ser	Leu	Arg	Ser	Glu	Leu	Asn	His	Gln
	195						200					205		His
Ala	Ala	Ala	Ile	Asp	Leu	Leu	Arg	His	Asn	His	His	Gln	Glu	Leu
	210					215					220			Ala
Ala	Ala	Lys	Met	Glu	Leu	Glu	Arg	Ser	Ile	Asp	Ile	Ser	Arg	Arg
	225				230					235				Gln
Ser	Lys	Glu	His	Ile	Cys	Arg	Ile	Thr	Asp	Leu	Gln	Glu	Glu	Leu
			245						250				255	Arg
His	Arg	Glu	His	His	Ile	Ser	Glu	Leu	Asp	Lys	Glu	Val	Gln	His
			260					265					270	Leu

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His Glu Asn Ile Ser Ala Leu Thr Lys Glu Leu Glu Phe Lys Gly Lys
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Glu Ile Leu Arg Ile Arg Ser Glu Ser Asn Gln Gln Ile Arg Leu His
290 295 300
Glu Gln Asp Leu Asn Lys Arg Leu Glu Lys Glu Leu Asp Val Met Thr
305 310 315 320
Ala Asp His Leu Arg Glu Lys Asn Ile Met Arg Ala Asp Phe Asn Lys
325 330 335
Thr Asn Glu Leu Leu Lys Glu Ile Asn Ala Ala Leu Gln Val Ser Leu
340 345 350
Glu Glu Met Glu Glu Lys Tyr Leu Met Arg Glu Ser Lys Pro Glu Asp
355 360 365
Ile Gln Met Ile Thr Glu Leu Lys Ala Met Leu Thr Glu Arg Asp Gln
370 375 380
Ile Ile Lys Lys Leu Ile Glu Asp Asn Lys Phe Tyr Gln Leu Glu Leu
385 390 395 400
Val Asn Arg Glu Thr Asn Phe Asn Lys Val Phe Asn Ser Ser Pro Thr
405 410 415
Val Gly Val Ile Asn Pro Leu Ala Lys Gln Lys Lys Lys Asn Asp Lys
420 425 430
Ser Pro Thr Asn Arg Phe Val Ser Val Pro Asn Leu Ser Ala Leu Glu
435 440 445
Ser Gly Gly Val Gly Asn Gly His Pro Asn Arg Leu Asp Pro Ile Pro
450 455 460
Asn Ser Pro Val His Asp Ile Glu Phe Asn Ser Ser Lys Pro Leu Pro
465 470 475 480
Gln Pro Val Pro Pro Lys Gly Pro Lys Thr Phe Leu Ser Pro Ala Gln
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Ser Glu Ala Ser Pro Val Ala Ser Pro Asp Pro Gln Arg Gln Glu Trp
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Phe Ala Arg Tyr Phe Thr Phe
515

<210> 16001

<211> 1596

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (128).. (1483)

<400> 16001

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09529459.072800

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gtatttattt cccaataaag aagggttcc aaaggc 1596

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 <212> PRT
 <213> Homo sapiens

<400> 16002

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			20					25					30		
Lys	Pro	Leu	Ile	Trp	Tyr	Pro	Leu	Asn	Leu	Leu	Glu	Arg	Val	Gly	Phe
		35				40					45				
Glu	Glu	Val	Ile	Val	Val	Thr	Thr	Arg	Asp	Val	Gln	Lys	Ala	Leu	Cys
	50				55			60							
Ala	Glu	Phe	Lys	Met	Lys	Met	Lys	Pro	Asp	Ile	Val	Cys	Ile	Pro	Asp
65				70				75						80	
Asp	Ala	Asp	Met	Gly	Thr	Ala	Asp	Ser	Leu	Arg	Tyr	Ile	Tyr	Pro	Lys
			85					90						95	
Leu	Lys	Thr	Asp	Val	Leu	Val	Leu	Ser	Cys	Asp	Leu	Ile	Thr	Asp	Val
		100					105					110			
Ala	Leu	His	Glu	Val	Val	Asp	Leu	Phe	Arg	Ala	Tyr	Asp	Ala	Ser	Leu
	115					120					125				
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		165		170
Asp Glu Glu Leu Val Ile Lys Gly Ser Ile Leu Gln Lys His Pro Arg				175
		180		185
Ile Arg Phe His Thr Gly Leu Val Asp Ala His Leu Tyr Cys Leu Lys				190
		195		200
Lys Tyr Ile Val Asp Phe Leu Met Glu Asn Gly Ser Ile Thr Ser Ile				205
		210		215
Arg Ser Glu Leu Ile Pro Tyr Leu Val Arg Lys Gln Phe Ser Ser Ala				220
225		230		235
Ser Ser Gln Gln Gly Gln Glu Glu Lys Glu Glu Asp Leu Lys Lys Lys				240
		245		250
Glu Leu Lys Ser Leu Asp Ile Tyr Ser Phe Ile Lys Glu Ala Asn Thr				255
		260		265
Leu Asn Leu Ala Pro Tyr Asp Ala Cys Trp Asn Ala Cys Arg Gly Asp				270
		275		280
Arg Trp Glu Asp Leu Ser Arg Ser Gln Val Arg Cys Tyr Val His Ile				285
		290		295
Met Lys Glu Gly Leu Cys Ser Arg Val Ser Thr Leu Gly Leu Tyr Met				300
305		310		315
Glu Ala Asn Arg Gln Val Pro Lys Leu Leu Ser Ala Leu Cys Pro Glu				320
		325		330
Glu Pro Pro Val His Ser Ser Ala Gln Ile Val Ser Lys His Leu Val				335
		340		345
Gly Val Asp Gly Leu Ile Gly Pro Glu Thr Gln Ile Gly Glu Lys Ser				350
		355		360
Ser Ile Lys Arg Ser Val Ile Gly Ser Ser Cys Leu Ile Lys Asp Arg				365
		370		375
Val Thr Ile Thr Asn Cys Leu Leu Met Asn Ser Val Thr Val Glu Glu				380
385		390		395
Gly Ser Asn Ile Gln Gly Ser Val Ile Cys Asn Asn Ala Val Ile Glu				400
		405		410
Lys Gly Ala Asp Ile Lys Asp Cys Leu Ile Gly Ser Gly Gln Arg Ile				415
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<210> 16003

<211> 1784

<212> DNA

<213> Homo sapiens

008270"69462960

<220>
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<222> (238).. (1080)

<400> 16003

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<210> 16004
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<212> PRT
<213> Homo sapiens

<400> 16004

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Asp Glu Thr Met Glu Lys Tyr Ile Pro Val Leu Met Ala Gln Ala Lys

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Lys Ser Val Glu Phe Cys Asn Asp His Asp Val Trp Lys Leu Asn Val
65 70 75 80
Ala His Val Leu Phe Met Gln Glu Asn Lys Tyr Lys Glu Ala Ile Gly
85 90 95
Phe Tyr Glu Pro Ile Val Lys Lys His Tyr Asp Asn Ile Leu Asn Val
100 105 110
Ser Ala Ile Val Leu Ala Asn Leu Cys Val Ser Tyr Ile Met Thr Ser
115 120 125
Gln Asn Glu Glu Ala Glu Glu Leu Met Arg Lys Ile Glu Lys Glu Glu
130 135 140
Glu Gln Leu Ser Tyr Asp Asp Pro Asn Arg Lys Met Tyr His Leu Cys
145 150 155 160
Ile Val Asn Leu Val Ile Gly Thr Leu Tyr Cys Ala Lys Gly Asn Tyr
165 170 175
Glu Phe Gly Ile Ser Arg Val Ile Lys Ser Leu Glu Pro Tyr Asn Lys
180 185 190
Lys Leu Gly Thr Asp Thr Trp Tyr Tyr Ala Lys Arg Cys Phe Leu Ser
195 200 205
Leu Leu Glu Asn Met Ser Lys His Met Ile Val Ile His Asp Ser Val
210 215 220
Ile Gln Glu Cys Val Gln Phe Leu Gly His Cys Glu Leu Tyr Gly Thr
225 230 235 240
Asn Ile Pro Ala Val Ile Glu Gln Pro Leu Glu Glu Glu Arg Met His
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Ile Tyr Glu Ile Ile Gly Trp Asn Lys
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<211> 1975
<212> DNA
<213> Homo sapiens

<220>
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<222> (317).. (1333)

<400> 16005
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09629469 . 072800

<210> 16006
<211> 339
<212> PRT
<213> Homo sapiens

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			20					25					30		
Glu	Ile	Gly	Val	Pro	Lys	Leu	Lys	Lys	Leu	Phe	Arg	Lys	Leu	Lys	Asp
		35					40					45			
Glu	Thr	Glu	Ala	Gly	Glu	Thr	Asp	Ser	Ala	His	Ser	Lys	His	Pro	Glu
	50					55					60				
Gln	Trp	Asp	Leu	Asp	Tyr	Ser	Leu	Glu	Pro	Tyr	Thr	Gly	Leu	Thr	Pro
65					70					75					80
Glu	Tyr	Met	Glu	Met	Ile	Ile	Gln	Phe	Gly	Phe	Val	Thr	Leu	Phe	Val
				85					90					95	

-10002/13211-

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Glu	Val	Arg	Leu	Asp	Ala	Lys	Lys	Phe	Val	Thr	Glu	Leu	Arg	Arg	Pro
		115					120					125			
Asp	Ala	Val	Arg	Thr	Lys	Asp	Ile	Gly	Ile	Trp	Phe	Asp	Ile	Leu	Ser
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145					150					155					160
Thr	Ser	Asp	Phe	Ile	Pro	Arg	Leu	Val	Tyr	Gln	Tyr	Ser	Tyr	Ser	His
			165						170					175	
Asn	Gly	Thr	Leu	His	Gly	Phe	Val	Asn	His	Thr	Leu	Ser	Phe	Phe	Asn
		180						185					190		
Val	Ser	Gln	Leu	Lys	Glu	Gly	Thr	Gln	Pro	Glu	Asn	Ser	Gln	Phe	Asp
		195					200					205			
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Ser	Val	Leu	Val	Asp	Trp	Met	Ile	Pro	Asp	Ile	Pro	Thr	Asp	Ile	Ser
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	275						280					285			
Glu	Glu	His	Glu	Lys	Leu	Lys	Leu	Met	Asp	Glu	Pro	Ala	Leu	Arg	Ser
	290					295					300				
Pro	Gly	Gly	Gly	Asp	Arg	Ser	Arg	Ser	Arg	Ala	Ala	Ser	Ser	Ala	Pro
305					310					315					320
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (105).. (1634)

<400> 16007
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aggccgtgtg tcatgctgcc aggaccgtt ctatcctttc cctgggcctc gcctgcttca 420
agcggcagcc agacaagggt gaacattcct atctggctca agtgttcaat ctcaactctgc 480
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<210> 16008
 <211> 510
 <212> PRT
 <213> Homo sapiens

<400> 16008
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 35 40 45
 Pro Ser Leu Leu Leu Ala Ile Lys Thr Ala Asn Phe Val Ala Val Asp
 50 55 60
 Thr Glu Leu Ser Gly Leu Gly Asp Arg Lys Ser Leu Leu Asn Gln Cys
 65 70 75 80
 Ile Glu Glu Arg Tyr Lys Ala Val Cys His Ala Ala Arg Thr Arg Ser
 85 90 95

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Ile Leu Ser Leu Gly Leu Ala Cys Phe Lys Arg Gln Pro Asp Lys Gly
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Glu His Ser Tyr Leu Ala Gln Val Phe Asn Leu Thr Leu Leu Cys Met
115 120 125
Glu Glu Tyr Val Ile Glu Pro Lys Ser Val Gln Phe Leu Ile Gln His
130 135 140
Gly Phe Asn Phe Asn Gln Gln Tyr Ala Gln Gly Ile Pro Tyr His Lys
145 150 155 160
Gly Asn Asp Lys Gly Asp Glu Ser Gln Ser Gln Ser Val Arg Thr Leu
165 170 175
Phe Leu Glu Leu Ile Arg Ala Arg Arg Pro Leu Val Leu His Asn Gly
180 185 190
Leu Ile Asp Leu Val Phe Leu Tyr Gln Asn Phe Tyr Ala His Leu Pro
195 200 205
Glu Ser Leu Gly Thr Phe Thr Ala Asp Leu Cys Glu Met Phe Pro Ala
210 215 220
Gly Ile Tyr Asp Thr Lys Tyr Ala Ala Glu Phe Arg Ala Arg Phe Val
225 230 235 240
Ala Ser Tyr Leu Glu Tyr Ala Phe Arg Lys Cys Glu Arg Glu Asn Gly
245 250 255
Lys Gln Arg Ala Ala Gly Ser Pro His Leu Thr Leu Glu Phe Cys Asn
260 265 270
Tyr Pro Ser Ser Met Arg Asp His Ile Asp Tyr Arg Cys Cys Leu Pro
275 280 285
Pro Ala Thr His Arg Pro His Pro Thr Ser Ile Cys Asp Asn Phe Ser
290 295 300
Ala Tyr Gly Trp Cys Pro Leu Gly Pro Gln Cys Pro Gln Ser His Asp
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Ile Asp Leu Ile Ile Asp Thr Asp Glu Ala Ala Ala Glu Asp Lys Arg
325 330 335
Arg Arg Arg Arg Arg Arg Glu Lys Arg Lys Arg Ala Leu Leu Asn Leu
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Pro Gly Thr Gln Thr Ser Gly Glu Ala Lys Asp Gly Pro Pro Lys Lys
355 360 365
Gln Val Cys Gly Asp Ser Ile Lys Pro Glu Glu Thr Glu Gln Glu Val
370 375 380
Ala Ala Asp Glu Thr Arg Asn Leu Pro His Ser Lys Gln Gly Asn Lys
385 390 395 400
Asn Asp Leu Glu Met Gly Ile Lys Ala Ala Arg Pro Glu Ile Ala Asp
405 410 415
Arg Ala Thr Ser Glu Val Pro Gly Ser Gln Ala Ser Pro Asn Pro Val
420 425 430
Pro Gly Asp Gly Leu His Arg Ala Gly Phe Asp Ala Phe Met Thr Gly
435 440 445
Tyr Val Met Ala Tyr Val Glu Val Ser Gln Gly Pro Gln Pro Cys Ser
450 455 460
Ser Gly Pro Trp Leu Pro Glu Cys His Asn Lys Val Tyr Leu Ser Gly
465 470 475 480

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Lys Ala Val Pro Leu Thr Val Ala Lys Ser Gln Phe Ser Arg Ser Ser
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Lys Ala His Asn Gln Lys Met Lys Leu Thr Trp Gly Ser Ser
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<210> 16009
<211> 2399
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (47).. (1909)

<400> 16009

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gaaccggcgg ctactgcgca ccagcccggc tgtacgagct ttgcgcaaag agcttttcct 180
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ctcacgacta ggggagatca tcagcatgga tgggtccatc actgtgaccc tggcagcgca 480
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ggagcagctg gtactgaagc ggggtggcaa catctcatc aacctgtatg gcattgacggc 1680
cgtgctgtcg cgggccagcc gctccatccg cattgggctc cgcaaccacg accacgaggt 1740
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gctggacaag tatgctccag aaaacctaga tgagcagatt aagaaagtgt cccagcagat 1860
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 aagggttgtc gcctggcctg ggagagcctc ttccaggttt tgacctgcag gcagtgtctc 2100
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 tcaaccacac attctctaag aaacagcttg aaagctctgt ctgggtcatt catttaact 2340
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<210> 16010
 <211> 621
 <212> PRT
 <213> Homo sapiens

<400> 16010
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 20 25 30
 Ser Pro Pro Val Arg Ala Phe Ala Lys Glu Leu Phe Leu Gly Lys Ile
 35 40 45
 Lys Lys Lys Glu Val Phe Pro Phe Pro Glu Val Ser Gln Asp Glu Leu
 50 55 60
 Asn Glu Ile Asn Gln Phe Leu Gly Pro Val Glu Lys Phe Phe Thr Glu
 65 70 75 80
 Glu Val Asp Ser Arg Lys Ile Asp Gln Glu Gly Lys Ile Pro Asp Glu
 85 90 95
 Thr Leu Glu Lys Leu Lys Ser Leu Gly Leu Phe Gly Leu Gln Val Pro
 100 105 110
 Glu Glu Tyr Gly Gly Leu Gly Phe Ser Asn Thr Met Tyr Ser Arg Leu
 115 120 125
 Gly Glu Ile Ile Ser Met Asp Gly Ser Ile Thr Val Thr Leu Ala Ala
 130 135 140
 His Gln Ala Ile Gly Leu Lys Gly Ile Ile Leu Ala Gly Thr Glu Glu
 145 150 155 160
 Gln Lys Ala Lys Tyr Leu Pro Lys Leu Ala Ser Gly Glu His Ile Ala
 165 170 175
 Ala Phe Cys Leu Thr Glu Pro Ala Ser Gly Ser Asp Ala Ala Ser Ile
 180 185 190
 Arg Ser Arg Ala Thr Leu Ser Glu Asp Lys Lys His Tyr Ile Leu Asn
 195 200 205
 Gly Ser Lys Val Trp Ile Thr Asn Gly Gly Leu Ala Asn Ile Phe Thr
 210 215 220
 Val Phe Ala Lys Thr Glu Val Val Asp Ser Asp Gly Ser Val Lys Asp
 225 230 235 240
 Lys Ile Thr Ala Phe Ile Val Glu Arg Asp Phe Gly Gly Val Thr Asn
 245 250 255

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Gly	Lys	Pro	Glu	Asp	Lys	Leu	Gly	Ile	Arg	Gly	Ser	Asn	Thr	Cys	Glu		
			260					265					270				
Val	His	Phe	Glu	Asn	Thr	Lys	Ile	Pro	Val	Glu	Asn	Ile	Leu	Gly	Glu		
		275					280					285					
Val	Gly	Asp	Gly	Phe	Lys	Val	Ala	Met	Asn	Ile	Leu	Asn	Ser	Gly	Arg		
	290					295					300						
Phe	Ser	Met	Gly	Ser	Val	Val	Ala	Gly	Leu	Leu	Lys	Arg	Leu	Ile	Glu		
305					310					315					320		
Met	Thr	Ala	Glu	Tyr	Ala	Cys	Thr	Arg	Lys	Gln	Phe	Asn	Lys	Arg	Leu		
				325					330					335			
Ser	Glu	Phe	Gly	Leu	Ile	Gln	Glu	Lys	Phe	Ala	Leu	Met	Ala	Gln	Lys		
			340					345					350				
Ala	Tyr	Val	Met	Glu	Ser	Met	Thr	Tyr	Leu	Thr	Ala	Gly	Met	Leu	Asp		
		355					360					365					
Gln	Pro	Gly	Phe	Pro	Asp	Cys	Ser	Ile	Glu	Ala	Ala	Met	Val	Lys	Val		
	370					375					380						
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385					390					395					400		
Leu	Gly	Gly	Leu	Gly	Tyr	Thr	Arg	Asp	Tyr	Pro	Tyr	Glu	Arg	Ile	Leu		
			405						410					415			
Arg	Asp	Thr	Arg	Ile	Leu	Leu	Ile	Phe	Glu	Gly	Thr	Asn	Glu	Ile	Leu		
			420					425					430				
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		435					440					445					
Thr	Thr	Arg	Ile	His	Glu	Leu	Lys	Gln	Ala	Lys	Val	Ser	Thr	Val	Met		
	450					455					460						
Asp	Thr	Val	Gly	Arg	Arg	Leu	Arg	Asp	Ser	Leu	Gly	Arg	Thr	Val	Asp		
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Leu	Gly	Leu	Thr	Gly	Asn	His	Gly	Val	Val	His	Pro	Ser	Leu	Ala	Asp		
				485					490					495			
Ser	Ala	Asn	Lys	Phe	Glu	Glu	Asn	Thr	Tyr	Cys	Phe	Gly	Arg	Thr	Val		
		500						505					510				
Glu	Thr	Leu	Leu	Leu	Arg	Phe	Gly	Lys	Thr	Ile	Met	Glu	Glu	Gln	Leu		
	515						520					525					
Val	Leu	Lys	Arg	Val	Ala	Asn	Ile	Leu	Ile	Asn	Leu	Tyr	Gly	Met	Thr		
	530					535					540						
Ala	Val	Leu	Ser	Arg	Ala	Ser	Arg	Ser	Ile	Arg	Ile	Gly	Leu	Arg	Asn		
545					550					555					560		
His	Asp	His	Glu	Val	Leu	Leu	Ala	Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr		
				565					570					575			
Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser	Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu		
		580						585					590				
Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys	Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys		
		595					600					605					
Arg	Ala	Tyr	Ile	Cys	Ala	His	Pro	Leu	Asp	Arg	Thr	Cys					
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<210> 16011
<211> 1346
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (65).. (664)

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cttcctaact gagccaaaag aggtggaaag atttctggct cagctctctg aatttgccac 240
caccaatcag atcagtcctg gctccctcag aagcatcgtg aaaagcctcc ttctggttcc 300
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tggaacattg ccaatcagtt cttaatgagg cacctgtgtg taaatacatg cttggtcttc 1200
totgcagaga actgaggcta aactctgtcc ctacttctgg ttttgccctg tcatgtcgta 1260
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<210> 16012
<211> 200
<212> PRT
<213> Homo sapiens

<400> 16012
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Leu Thr Glu Val Leu Phe His Phe Leu Thr Glu Pro Lys Glu Val Glu
35 40 45
Arg Phe Leu Ala Gln Leu Ser Glu Phe Ala Thr Thr Asn Gln Ile Ser

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50 55 60
Leu Gly Ser Leu Arg Ser Ile Val Lys Ser Leu Leu Leu Val Pro Asn
65 70 75 80
Gly Ala Leu Lys Lys Ser Leu Thr Ala Lys Gln Val Gln Ala Asp Phe
85 90 95
Ile Thr Leu Gly Leu Ser Glu Glu Lys Ala Thr Tyr Phe Ser Glu Lys
100 105 110
Trp Lys Gln Asn Ala Pro Thr Leu Ala Arg Trp Ala Ile Gly Gln Thr
115 120 125
Leu Met Ile Asn Gln Leu Ile Asp Met Glu Trp Lys Phe Gly Val Thr
130 135 140
Ser Gly Ser Ser Glu Leu Glu Lys Val Gly Ser Ile Phe Leu Gln Leu
145 150 155 160
Lys Leu Val Val Lys Lys Gly Asn Gln Thr Glu Asn Val Tyr Ile Glu
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Leu Thr Leu Pro Gln Phe Tyr Ser Phe Leu His Glu Met Glu Arg Val
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Arg Thr Ser Met Glu Cys Phe Cys
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<210> 16013
<211> 1596
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (67).. (807)

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 <211> 247
 <212> PRT
 <213> Homo sapiens

<400> 16014

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			20					25					30		
Asp	Gly	Ile	Phe	Tyr	Glu	Phe	Arg	Ser	Tyr	Tyr	Leu	Lys	Pro	Ser	Lys
		35					40					45			
Met	Asn	Glu	Phe	Leu	Glu	Asn	Phe	Glu	Lys	Asn	Ala	His	Leu	Arg	Thr
	50					55					60				
Ala	His	Ser	Glu	Leu	Val	Gly	Tyr	Trp	Ser	Val	Glu	Phe	Gly	Gly	Arg
65					70					75					80
Met	Asn	Thr	Val	Phe	His	Ile	Trp	Lys	Tyr	Asp	Asn	Phe	Ala	His	Arg
				85					90					95	
Thr	Glu	Val	Gln	Lys	Ala	Leu	Ala	Lys	Asp	Lys	Glu	Trp	Gln	Glu	Gln
			100					105					110		
Phe	Leu	Ile	Pro	Asn	Leu	Ala	Leu	Ile	Asp	Lys	Gln	Glu	Ser	Glu	Ile
	115					120					125				
Thr	Tyr	Leu	Val	Pro	Trp	Cys	Lys	Leu	Glu	Lys	Pro	Pro	Lys	Glu	Gly
	130					135					140				
Val	Tyr	Glu	Leu	Ala	Thr	Phe	Gln	Met	Lys	Pro	Gly	Gly	Pro	Ala	Leu
145					150					155					160
Trp	Gly	Asp	Ala	Phe	Lys	Arg	Ala	Val	His	Ala	His	Val	Asn	Leu	Gly
			165					170					175		
Tyr	Thr	Lys	Leu	Val	Gly	Val	Phe	His	Thr	Glu	Tyr	Gly	Ala	Leu	Asn
			180					185					190		
Arg	Val	His	Val	Leu	Trp	Trp	Asn	Glu	Ser	Ala	Asp	Ser	Arg	Ala	Ala
		195					200					205			
Gly	Arg	His	Lys	Ser	His	Glu	Asp	Pro	Arg	Val	Val	Ala	Ala	Val	Arg
	210					215					220				
Glu	Ser	Val	Asn	Tyr	Leu	Val	Ser	Gln	Gln	Asn	Met	Leu	Leu	Ile	Pro
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Thr Ser Phe Ser Pro Leu Lys
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<212> PRT
<213> Homo sapiens

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-10012/13211-

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35 40 45
Gln Ile Lys Asn Gly Ser Val Met Ser His Leu Gly Ala Ser Thr His
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Gly Gln Thr Cys Leu Pro Met Glu Val Lys Ser Cys Ser Val Thr Gln
65 70 75 80
Ala Gly Val Gln Leu Arg Asp Leu Ser Ser Leu Gln Pro Pro Pro Ser
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 <211> 368
 <212> PRT
 <213> Homo sapiens

<400> 16018

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		65				70					75			80	
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			165					170						175	
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Phe	Cys	Ile	Leu	Leu	Tyr	Phe	Tyr	Lys	Arg	Lys	Gly	Met	Lys	His	Met
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	210						215					220			
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Met	Gln	Leu	Thr	Tyr	Pro	Ile	Phe	Tyr	Ile	Met	Phe	Ile	Ile	Met	Ile
				245					250					255	
Ala	Ser	Cys	Val	Phe	Gln	Val	Lys	Phe	Leu	Asn	Gln	Ala	Thr	Lys	Leu
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Tyr	Asn	Thr	Thr	Thr	Val	Val	Pro	Val	Asn	His	Ile	Phe	Phe	Thr	Ile
	275						280						285		
Ser	Ala	Ile	Ile	Ala	Gly	Ile	Ile	Phe	Tyr	Gln	Glu	Phe	Leu	Gly	Ala
	290					295						300			
Pro	Phe	Leu	Thr	Val	Phe	Ile	Tyr	Leu	Phe	Gly	Cys	Phe	Leu	Ser	Phe
305						310					315				320
Leu	Gly	Val	Phe	Leu	Val	Thr	Arg	Asn	Arg	Glu	Lys	Glu	His	Leu	Gln
				325					330					335	
Gln	Ser	Tyr	Ile	Asp	Phe	Gly	Asn	Ile	Pro	Asp	Thr	Thr	Pro	Glu	Arg
			340					345						350	
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 <212> DNA
 <213> Homo sapiens

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 <222> (222).. (614)

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			20					25					30		
Pro	Leu	Arg	Pro	Glu	Val	Pro	Glu	Ile	Gln	Glu	Cys	Pro	Ile	Ala	Gln
			35				40				45				
Glu	Ser	Leu	Glu	Ser	Gln	Glu	Gln	Arg	Ala	Arg	Ala	Ala	Leu	Arg	Glu
			50				55				60				
Arg	Tyr	Leu	Arg	Ser	Leu	Leu	Ala	Met	Val	Gly	His	Gln	Val	Ser	Phe
					70					75					80
Thr	Leu	His	Glu	Gly	Val	Arg	Val	Ala	Ala	His	Phe	Gly	Ala	Thr	Asp
					85					90					95
Leu	Asp	Val	Ala	Asn	Phe	Tyr	Val	Ser	Gln	Leu	Gln	Thr	Pro	Ile	Gly
			100						105				110		
Val	Gln	Ala	Glu	Ala	Leu	Leu	Arg	Cys	Ser	Asp	Ile	Ile	Ser	Tyr	Thr
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<212> PRT
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Leu Leu Ser Ala Cys Lys Ile Leu Lys Leu Lys Val Asp Lys Asn Lys
145 150 155 160
Met Val Ala Thr Ser Gly Val Lys Lys Ala Ile Phe Asp Arg Leu Cys
165 170 175
Lys Gln Leu Glu Lys Ile Gly Gln Gln Val Asp Arg Glu Pro Gly Asp
180 185 190
Val Ala Thr Pro Pro Arg Lys Arg Lys Lys Ile Val Val Glu Ala Pro
195 200 205
Ala Lys Glu Met Glu Lys Val Glu Glu Met Pro His Lys Pro Gln Lys
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<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (246).. (593)

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<210> 16024
 <211> 116
 <212> PRT
 <213> Homo sapiens

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<400> 16024
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Asp Glu Pro Pro Glu Gly Ser Met Lys Asp His Pro Gln Gln Gln Pro
          20             25             30
Gly Met Leu Ser Arg Val Thr Gly Gly Ile Phe Ser Val Thr Lys Gly
          35             40             45
Ala Val Gly Ala Thr Ile Gly Gly Val Ala Trp Ile Gly Gly Lys Ser
          50             55             60
Leu Glu Val Thr Lys Thr Ala Val Thr Thr Val Pro Ser Met Gly Ile
          65             70             75             80
Gly Leu Val Lys Gly Gly Val Ser Ala Val Ala Gly Gly Val Thr Ala
          85             90             95
Val Gly Ser Ala Val Val Asn Lys Val Pro Leu Thr Gly Lys Lys Lys
          100             105             110
Asp Lys Ser Asp
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<210> 16025
 <211> 1478

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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (291).. (947)

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<210> 16026
<211> 219
<212> PRT
<213> Homo sapiens

<400> 16026
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20 25 30
Val Leu Pro Gly Met Lys Arg Arg Arg Gln Gly His Ile Val Val Ile
35 40 45
Ser Ser Val Met Gly Leu Gln Gly Val Ile Phe Asn Asp Val Tyr Ala

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50		55		60
Ala Ser Lys Phe	Ala Leu Glu Gly Phe Phe Glu	Ser Leu Ala Ile Gln		
65	70	75	80	
Leu Leu Gln Phe	Asn Ile Phe Ile Ser Leu Val Glu	Pro Gly Pro Val		
	85	90	95	
Val Thr Glu Phe	Glu Gly Lys Leu Leu Ala Gln Val	Ser Met Ala Glu		
	100	105	110	
Phe Pro Gly Thr	Asp Pro Glu Thr Leu His Tyr Phe	Arg Asp Leu Tyr		
	115	120	125	
Leu Pro Ala Ser	Arg Lys Leu Phe Cys Ser Val Gly	Gln Asn Pro Gln		
	130	135	140	
Asp Val Val Gln	Ala Ile Val Asn Val Ile Ser Ser	Thr Arg Pro Pro		
145	150	155	160	
Leu Arg Arg Gln	Thr Asn Ile Arg Tyr Ser Pro	Leu Thr Thr Leu Lys		
	165	170	175	
Thr Val Asp Ser	Gly Ser Leu Tyr Val Arg Thr Thr	His Arg Leu		
	180	185	190	
Leu Phe Arg Cys	Pro Arg Leu Leu Asn Leu Gly Leu	Gln Cys Leu Ser		
	195	200	205	
Cys Gly Cys Leu	Pro Thr Arg Val Arg Pro Arg			
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<210> 16027
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (430).. (1410)

<400> 16027

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gagaatggct	ggcgtgctcg	cagcgccttc	aaactgctac	aactggataa	ggaattccaa	540
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<210> 16028
 <211> 327
 <212> PRT
 <213> Homo sapiens

<400> 16028

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		20						25					30		
Asp	Lys	Glu	Phe	Gln	Leu	Phe	Gln	Gly	Val	Thr	Arg	Ala	Val	Asp	Leu
		35					40					45			
Cys	Ala	Ala	Pro	Gly	Ser	Trp	Ser	Gln	Val	Leu	Ser	Arg	Lys	Ile	Gly
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65					70					75				80	
Pro	Leu	Pro	Gly	Val	Val	Gln	Ile	Gln	Gly	Asp	Ile	Thr	Gln	Leu	Ser
			85						90					95	
Thr	Ala	Lys	Glu	Ile	Ile	Gln	His	Phe	Lys	Gly	Cys	Pro	Ala	Asp	Leu
		100						105					110		
Val	Val	Cys	Asp	Gly	Ala	Pro	Asp	Val	Thr	Gly	Leu	His	Asp	Val	Asp
		115					120					125			
Glu	Tyr	Met	Gln	Ala	Gln	Leu	Leu	Leu	Ala	Ala	Leu	Asn	Ile	Ala	Thr
	130					135					140				
His	Val	Leu	Lys	Pro	Gly	Gly	Cys	Phe	Val	Ala	Lys	Ile	Phe	Arg	Gly
145					150					155				160	
Arg	Asp	Val	Thr	Leu	Leu	Tyr	Ser	Gln	Leu	Gln	Val	Phe	Phe	Ser	Ser

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				165					170					175	
Val	Leu	Cys	Ala	Lys	Pro	Arg	Ser	Ser	Arg	Asn	Ser	Ser	Ile	Glu	Ala
			180					185					190		
Phe	Ala	Val	Cys	Gln	Gly	Tyr	Asp	Pro	Pro	Glu	Gly	Phe	Ile	Pro	Asp
		195					200					205			
Leu	Ser	Lys	Pro	Leu	Leu	Asp	His	Ser	Tyr	Asp	Phe	Asn	Gln	Leu	Asp
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Gly	Pro	Thr	Arg	Ile	Ile	Val	Pro	Phe	Val	Thr	Cys	Gly	Asp	Leu	Ser
225				230						235				240	
Ser	Tyr	Asp	Ser	Asp	Arg	Ser	Tyr	Pro	Leu	Asp	Leu	Glu	Gly	Gly	Ser
			245					250					255		
Glu	Tyr	Lys	Tyr	Thr	Pro	Pro	Thr	Gln	Pro	Pro	Ile	Ser	Pro	Pro	Tyr
		260					265					270			
Gln	Glu	Ala	Cys	Thr	Leu	Lys	Arg	Lys	Gly	Gln	Leu	Ala	Lys	Glu	Ile
	275					280					285				
Arg	Pro	Gln	Asp	Cys	Pro	Ile	Ser	Arg	Val	Asp	Thr	Phe	Pro	Gln	Pro
	290				295					300					
Leu	Ala	Ala	Pro	Gln	Cys	His	Thr	Leu	Leu	Ala	Pro	Glu	Met	Glu	Asp
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (89).. (1138)

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<210> 16030
 <211> 350
 <212> PRT
 <213> Homo sapiens

<400> 16030

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		20						25					30		
Leu	Ser	His	Glu	Val	Leu	Cys	His	Ile	Phe	Arg	Tyr	Leu	Pro	Leu	Gln
		35					40					45			
Asp	Ile	Met	Cys	Met	Glu	Cys	Leu	Ser	Arg	Lys	Leu	Lys	Glu	Ala	Val
	50					55					60				
Thr	Leu	Tyr	Leu	Arg	Val	Val	Arg	Val	Val	Asp	Leu	Cys	Ala	Gly	Arg
	65				70					75					80
Trp	Trp	Glu	Tyr	Met	Pro	Ser	Gly	Phe	Thr	Asp	Ala	Ser	Phe	Leu	Thr
				85					90					95	
Leu	Leu	Lys	Lys	Met	Pro	Asp	Val	Glu	Gln	Leu	Tyr	Gly	Leu	His	Pro
			100					105					110		
Arg	Tyr	Leu	Glu	Arg	Arg	Arg	Val	Arg	Gly	His	Glu	Ala	Phe	Ser	Ile
	115						120					125			
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	130					135					140				

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Glu Thr Ser His Leu Glu Leu Val Glu Ser Ile Trp Thr Tyr Met Pro
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His Val His Ile Leu Gly Lys Phe Arg Asn Arg Asn Gly Ala Phe Pro
165 170 175
Ile Pro Pro Glu Asn Lys Leu Lys Ile Pro Ile Gly Ala Lys Ile Gln
180 185 190
Thr Leu His Leu Val Gly Val Asn Val Pro Glu Ile Pro Cys Ile Pro
195 200 205
Met Leu Arg His Leu Tyr Met Lys Trp Val Arg Leu Thr Lys Pro Gln
210 215 220
Pro Phe Lys Asp Phe Leu Cys Ile Ser Leu Arg Thr Phe Val Met Arg
225 230 235 240
Asn Cys Ala Gly Pro Thr Asn Ser Leu Lys Tyr Val Pro Leu Val Thr
245 250 255
Gly Leu Ala Ser Ala Arg Asn Ser Glu His Leu Glu Met Val Arg Val
260 265 270
Pro Phe Leu Gly Gly Leu Ile Gln His Val Val Glu Asp Ser Trp Arg
275 280 285
Ser Gly Gly Phe Arg Asn Leu His Thr Ile Val Leu Gly Ala Cys Lys
290 295 300
Asn Ala Leu Glu Val Asp Leu Gly Tyr Leu Asn Ile Thr Ala Ala Arg
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Phe Ser Ala Leu Lys Met Ala Glu Leu Glu Phe Pro Pro Val
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<210> 16031
<211> 1906
<212> DNA
<213> Homo sapiens

<220>
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<222> (219).. (1142)

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 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 16032

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			20					25					30		
Thr	Asp	Ile	Thr	Gly	Ala	Lys	Glu	Glu	Leu	Leu	Asp	Asp	Asn	Asn	Phe
		35					40					45			
Ile	Ser	Asp	Lys	Glu	Ser	Gly	Val	His	Lys	Pro	Lys	Asp	Cys	Gln	Thr
	50					55					60				
Ser	Phe	Gln	Lys	Asn	Asn	Thr	Leu	Thr	Leu	Pro	Glu	Glu	Leu	Ser	Lys
65					70					75				80	
Asp	Lys	Ser	Glu	Asn	Ala	Leu	Ser	Gly	Gly	Gln	Ser	Ser	Leu	Phe	Ile
				85					90					95	
His	Ala	Gly	Ala	Pro	Thr	Val	Ser	Ser	Glu	Asn	Phe	Ile	Leu	Pro	Lys
			100					105					110		
Gly	Ala	Ala	Val	Asn	Gly	Pro	Val	Ser	His	Ser	Ser	Leu	Thr	Lys	Thr
	115						120					125			
Ser	Asn	Met	Asn	Lys	Gly	Ser	Val	Ser	Leu	Thr	Thr	Gly	Gln	Pro	Val
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Asp Gln Pro Thr Thr Glu Ser Cys Ser Thr Leu Lys Val Ala Ala Asp
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 Leu Gln Leu Ser Thr Pro Gln Lys Ala Ser Gln His Gln Val Leu Phe
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 Leu Leu Ser Asp Val Ala His Ala Lys Asn Pro Thr His Ser Asn Lys
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 Lys Leu Pro Thr Ser Ala Ser Val Gly Cys Asp Ile Gln Asn Ser Val
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 Gly Ser Asn Ile Lys Ser Asp Gly Thr Leu Ile Asn Gln Val Glu Val
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 Gly Glu Asp Gly Glu Asp Leu Leu Val Lys Asp Cys Val Asn Thr
 225 230 235 240
 Val Thr Gly Ile Ser Ser Gly Thr Asp Gly Phe Arg Ser Glu Asn Asp
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 Thr Asn Trp Asp Pro Gln Lys Glu Phe Ile Gln Phe Leu Met Thr Asn
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 <213> Homo sapiens

<220>
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 <222> (169).. (1023)

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<210> 16034

<211> 285

<212> PRT

<213> Homo sapiens

<400> 16034

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           20           25           30
Leu Leu Ser Asn Tyr Trp Phe Val Gly Thr Gln Lys Val Pro Lys Pro
           35           40           45
Leu Cys Glu Lys Gly Leu Ala Ala Lys Cys Phe Asp Met Pro Val Ser
           50           55           60
Leu Asp Gly Asp Thr Asn Thr Ser Thr Gln Glu Val Val Gln Tyr Asn
           65           70           75           80
Trp Glu Thr Gly Asp Asp Arg Phe Ser Phe Arg Ser Phe Arg Ser Gly
           85           90           95
Met Trp Leu Ser Cys Glu Glu Thr Val Glu Glu Pro Gly Glu Arg Cys
           100          105          110
Arg Ser Phe Ile Glu Leu Thr Pro Pro Ala Lys Arg Gly Glu Lys Gly
           115          120          125
Leu Leu Glu Phe Ala Thr Leu Gln Gly Pro Cys His Pro Thr Leu Arg
           130          135          140
Phe Gly Gly Lys Arg Leu Met Glu Lys Ala Ser Leu Pro Ser Pro Pro
           145          150          155          160
Leu Gly Leu Cys Gly Lys Asn Pro Met Val Ile Pro Gly Asn Ala Asp
           165          170          175
His Leu His Arg Thr Ser Ile His Gln Leu Pro Pro Ala Thr Asn Arg
           180          185          190
Leu Ala Thr His Trp Glu Pro Cys Leu Trp Ala Gln Thr Glu Arg Leu
           195          200          205
Cys Cys Cys Phe Leu Cys Pro Val Arg Ser Pro Gly Asp Gly Gly Pro
           210          215          220
His Asp Val Phe Thr Ser Leu Pro Ser Asp Cys Gln Leu Gly Ser Arg
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1879

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<211> 146

<212> PRT

<213> Homo sapiens

<400> 16036

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			20					25					30		
Trp	Ala	Leu	Ser	Asn	Gly	Trp	Asp	Ser	Gln	Val	Tyr	Cys	Ser	Lys	Glu
		35					40					45			
Gln	Ser	Gln	Ser	Ala	His	Leu	Trp	Lys	Ser	Pro	Phe	Pro	Asp	Val	Val
	50					55					60				
Pro	Leu	Gln	Pro	Glu	Val	Ser	Ser	Tyr	Arg	Arg	Gly	Arg	Lys	Lys	Arg
65					70				75						80
Val	Pro	Tyr	Thr	Lys	Val	Gln	Leu	Lys	Glu	Leu	Glu	Lys	Glu	Tyr	Ala
				85					90					95	
Ala	Ser	Lys	Phe	Ile	Thr	Lys	Glu	Lys	Arg	Arg	Arg	Ile	Ser	Ala	Thr
			100					105					110		
Thr	Asn	Leu	Ser	Glu	Arg	Gln	Val	Thr	Ile	Trp	Phe	Gln	Asn	Arg	Arg
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<211> 2046

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (220).. (1659)

<400> 16037

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cgggagatgg	agctgcggca	caagaatgag	atgctgcgag	tggagaccga	ggcccgggag	300
cgcgccaagg	ccgagcggga	gaatgcagac	atcatccgag	agcagatccg	cctgaaggcg	360
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<210> 16038

<211> 480

<212> PRT

<213> Homo sapiens

<400> 16038

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Arg Glu Asn Ala Asp Ile Ile Arg Glu Gln Ile Arg Leu Lys Ala Ser
          35             40             45
Glu His Arg Gln Thr Val Leu Glu Ser Ile Arg Thr Ala Gly Thr Leu
          50             55             60
Phe Gly Glu Gly Phe Arg Ala Phe Val Thr Asp Arg Asp Lys Val Thr
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Ala Thr Val Ala Gly Leu Thr Leu Leu Ala Val Gly Val Tyr Ser Ala
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$\langle 220 \rangle$
 $\langle 221 \rangle$ CDS
 $\langle 222 \rangle$ (685) .. (1395)

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<211> 237
<212> PRT
<213> Homo sapiens

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35 40 45
Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro Gly Glu
50 55 60
Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile Lys Ala
65 70 75 80
Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu Ser Leu
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Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn Asn Pro
100 105 110
Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val Phe Gly
115 120 125
Val Ala Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr Thr His
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Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu Glu Pro
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Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp Ala Val
165 170 175
Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His Lys Thr
180 185 190
Ile Arg Arg Glu Leu Asn Leu Pro Glu Asp Gly Pro Ala Pro Gly Phe
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225 230 235

<210> 16041
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<212> DNA
<213> Homo sapiens

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Ser	Ile	Ser	Ser	Val	Leu	Ile	Ser	Ile	Gln	Ser	Leu	Met	Thr	Glu	Asn
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Pro	Tyr	His	Asn	Glu	Pro	Gly	Phe	Glu	Gln	Glu	Arg	His	Pro	Gly	Asp
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Gly	Val	Met	Glu	Lys	Ser	Phe	Leu	Glu	Tyr	Tyr	Asp	Phe	Tyr	Glu	Val
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Ala	Cys	Lys	Asp	Arg	Leu	His	Leu	Gln	Gly	Gln	Thr	Met	Gln	Asp	Pro
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Phe	Gly	Glu	Lys	Arg	Gly	His	Phe	Asp	Tyr	Gln	Ser	Leu	Leu	Met	Arg
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Leu	Gly	Leu	Ile	Arg	Gln	Lys	Val	Leu	Glu	Arg	Leu	His	Asn	Glu	Asn
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Ala	Glu	Met	Asp	Ser	Asp	Ser	Ser	Ser	Ser	Gly	Thr	Glu	Thr	Asp	Leu
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<212> DNA
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<222> (90).. (1346)

<400> 16043

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Ser	Thr	Asn	Pro	Arg	Lys	Arg	Asn	Gln	Arg	Ile	Leu	Ala	Ala	Glu	Thr
	50					55					60				
Asp	Arg	Leu	Ser	Tyr	Val	Gly	Asn	Asn	Phe	Gly	Thr	Gly	Ala	Leu	Lys
65					70					75					80
Cys	Asn	Thr	Leu	Cys	Arg	His	Phe	Val	Gly	Ile	Leu	Asn	Lys	Thr	Ser
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Phe	Ser	Asp	Val	Ser	Val	Glu	Ser	Glu	Leu	Ala	Leu	Glu	Ser	Gln	Thr
		115					120					125			
Lys	Thr	Tyr	Arg	Glu	Lys	Met	Asp	Ser	Cys	Ile	Glu	Ala	Phe	Gly	Thr
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Lys	Pro	Glu	Asp	Val	Tyr	Lys	Phe	Glu	Asp	Leu	Leu	Ser	Pro	Ala	Glu
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His	Arg	Val	Val	Lys	Arg	Lys	Ser	Ala	Leu	Gly	Pro	Gly	Val	Pro	His
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Ile	Ile	Asn	Thr	Lys	Leu	Leu	Lys	His	Phe	Thr	Cys	Leu	Thr	Tyr	Asn
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Asn	Gly	Arg	Leu	Arg	Asn	Leu	Ile	Ser	Asp	Ser	Met	Lys	Ala	Lys	Ile
				325					330				335		
Thr	Ala	Tyr	Val	Ile	Ile	Leu	Ala	Leu	His	Ile	His	Asp	Phe	Gln	Ile
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Asp	Leu	Thr	Val	Leu	Gln	Arg	Asp	Leu	Lys	Leu	Ser	Glu	Lys	Arg	Met
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Met	Glu	Ile	Ala	Lys	Ala	Met	Arg	Leu	Lys	Ile	Ser	Lys	Arg	Arg	Val
	370					375					380				
Ser	Val	Ala	Ala	Gly	Ser	Glu	Glu	Asp	His	Lys	Leu	Gly	Thr	Leu	Ser
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09629469.072800

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 Tyr Gly Ala Leu Thr Leu Pro Val Asn His Ile Phe Ser Glu Gln Arg
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 Phe Pro Val Ala Thr Met Lys Thr Leu Leu Arg Thr Trp Ser Glu Leu
 50 55 60
 Tyr Arg Ala Phe Ala Arg Cys Ala Ala Leu Val Ala Thr Ala Glu Glu
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 Asn Leu Cys Cys Glu Glu Leu Ser Ser Lys Ile Met Ser Ser Leu Glu
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 Asp Glu Gly Phe Ser Asn Leu Leu Phe Val Asp Arg Ile Ile Tyr Ile
 100 105 110
 Ile Thr Val Met Val Asp Cys Ile Asp Phe Ser Pro Tyr Asn Ile Lys
 115 120 125
 Tyr Gln Pro Lys Val Lys Ser Pro Gln Arg Pro Ser Asp Trp Ser Lys
 130 135 140
 Lys Lys Asn Glu Pro Leu Gly Lys Leu Thr Ser Leu Phe Lys Leu Ile
 145 150 155 160
 Val Lys Val Ile Tyr Ser Phe His Thr Leu Ser Phe Lys Glu Ala His
 165 170 175
 Ser Asp Thr Leu Phe Thr Ile Gly Asn Ser Ile Thr Ser Ile Ile Ser
 180 185 190
 Ser Val Leu Gly His Ile Ser Leu Pro Ser Met Ile Arg Lys Ile Phe
 195 200 205
 Ala Thr Leu Thr Arg Pro Leu Ala Leu Phe Tyr Glu Asn Ser Lys Leu
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 Asp Glu Val Pro Lys Val Tyr Ser Cys Leu Asn Lys Leu Glu Lys
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 Leu Leu Gly Glu Ile Ile Ala Cys Leu Gln Phe Ser Tyr Thr Gly Thr
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Lys	Pro	Val	Leu	Thr	Gln	Ala	Lys	Gln	Lys	Phe	Leu	Leu	Leu	Leu	Pro	
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<400> 16055

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Ser	Ser	Leu	Arg	Leu	Arg	Glu	His	Arg	Cys	Ala	Ala	Ala	Ala	Ala	Gln
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<210> 16056

<211> 1700

<212> DNA

<213> Homo sapiens

<400> 16056

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<400> 16057

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<210> 16058
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<400> 16058

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Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His	Ile	Gln	Glu	Cys	Val	Pro
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Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe	Ala	Gln	Leu	Asp	Ser	Ile
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 <212> DNA
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 <212> PRT
 <213> Homo sapiens

<400> 16060

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Leu	Glu	Ser	Pro	Met	Ala	Thr	Ile	Thr	Lys	Ile	Thr	Arg	Arg	Arg	His
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Glu	Asn	Pro	Pro	His	Gly	Val	Ala	Ser	Val	Lys	Glu	Trp	Phe	Asn	Tyr
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Ser Gly Phe Arg Gly Gly Ser Ser Tyr Asn His Glu Thr Glu Thr Ile
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Glu Pro Gln Glu Pro Ser Leu Gln Asp Ala Ser Leu Lys Pro Lys Val
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210 215 220
Lys Glu Lys Glu Lys Ala Ile Phe Pro Pro Arg Ile Leu Ser Thr Arg
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Pro Gly Gln Lys Ser Pro Ile Ile Ile His Asp Asp Asn Ser Ser Asp
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<212> DNA
<213> Homo sapiens

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009270" 69469" 072800

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<212> PRT

<213> Homo sapiens

<400> 16064

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Asp Gln Tyr Thr Leu Glu His Met His Ala Phe Gly Met Tyr Asn Tyr
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Leu His Cys Asp Ser Trp Tyr Gln Asp Ser Val Tyr Tyr Ile Asp Thr
65 70 75 80
Leu Gly Arg Ile Met Asn Leu Thr Val Met Leu Asp Thr Ala Leu Gly
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Lys Pro Arg Glu Val Phe Arg Leu Pro Thr Asp Leu Thr Ala Cys Asp
100 105 110
Asn Arg Leu Cys Ala Ser Ile His Phe Ser Ser Ser Thr Trp Val Thr
115 120 125
Leu Ser Asp Gly Thr Gly Arg Leu Tyr Val Ile Gly Thr Gly Glu Arg
130 135 140
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145 150 155 160
Gly Asp Pro Phe Ile Ile Ile His Ser Ile Ser Leu Leu Asn Ala Glu
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Glu His Ser Ile Ala Thr Leu Leu Leu Arg Ile Glu Lys Glu Glu Leu
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<211> 1695
<212> DNA
<213> Homo sapiens

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<212> PRT

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<213> Homo sapiens

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Gln	Gly	Asp	Ser	Asn	Phe	Asn	Arg	Met	Trp	Gln	Pro	Glu	Trp	Gly	Met
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His	Gln	Gln	Pro	Pro	His	Pro	Pro	Pro	Asp	Gln	Pro	Trp	Met	Pro	Pro
			100					105					110		
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		115				120						125			
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Asn	Asn	His	Asn	Phe	Gly	Gly	Pro	Pro	Asp	Asn	Phe	Ala	Val	Gly	Pro
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Val	Asn	Gln	Phe	Asp	Tyr	Gln	His	Gly	Ala	Ala	Phe	Gly	Pro	Pro	Gln
				165					170					175	
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			180					185					190		
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			260					265					270		
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		275					280					285			
Asp	Ser	Asp	Glu	Glu	Glu	Glu	Asp	Thr	Glu	Asn	Val	Glu	Ala	Ala	Ser
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Ser	Asp	Pro	Glu	Met	Thr	Glu	Glu	Glu	Lys	Glu	Tyr	Gln	Met	Met	Leu
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Leu	Thr	Lys	Met	Leu	Leu	Thr	Glu	Ile	Leu	Leu	Asp	Val	Thr	Asp	Glu
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 <213> Homo sapiens

<400> 16070
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 35 40 45
 His Gln Phe Tyr Glu Thr Leu Pro Ala Glu Met Arg Lys Phe Thr Pro
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 Gln Tyr Lys Gly Val Val Ser Val Arg Phe Glu Glu Asp Glu Asp Arg
 65 70 75 80
 Asn Leu Cys Leu Ile Ala Tyr Pro Leu Lys Gly Asp His Gly Ile Val
 85 90 95
 Asp Ile Val Asp Asn Ser Asp Cys Glu Pro Lys Ser Lys Leu Leu Arg
 100 105 110
 Trp Thr Thr Asn Lys Lys His His Val Leu Glu Thr Glu Lys Thr Pro
 115 120 125
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 Lys Leu Glu Glu Glu Phe Glu Trp Leu Lys Lys Ser Glu Val Leu Tyr
 145 150 155 160
 Tyr Thr Val Glu Lys Lys Gly Asn Ile Ser Ser Gln Leu Lys His Tyr
 165 170 175
 Asn Pro Trp Ser Met Lys Cys His Gln Gln Gln Leu Gln Arg Met Lys
 180 185 190
 Glu Asn Ala Lys His Arg Asn Gln Tyr Lys Phe Ile Leu Glu Asn
 195 200 205
 Leu Thr Ser Arg Tyr Glu Val Pro Cys Val Leu Asp Leu Lys Met Gly
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-10067/13211-

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			245						250					255	
Cys	Gly	Met	Gln	Val	Tyr	Gln	Ala	Gly	Ser	Gly	Gln	Leu	Met	Phe	Met
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Asn	Lys	Tyr	His	Gly	Arg	Lys	Leu	Ser	Val	Gln	Gly	Phe	Lys	Glu	Ala
	275						280					285			
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Tyr	Lys	Pro	Ile	Gly	Ala	Ser	Ser	Val	Asp	Val	Arg	Met	Ile	Asp	Phe
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Gly	Gln	Asp	Ala	Gly	Tyr	Ile	Phe	Gly	Leu	Gln	Ser	Leu	Ile	Asp	Ile
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 <222> (360).. (1082)

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<211> 241

<212> PRT

<213> Homo sapiens

<400> 16072

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Arg Glu Ala Ser Lys Tyr Trp Asp Thr Phe Tyr Lys Ile His Lys Asn
          35             40             45
Lys Phe Phe Lys Asp Arg Asn Trp Leu Leu Arg Glu Phe Pro Glu Ile
          50             55             60
Leu Pro Val Asp Gln Lys Pro Glu Glu Lys Ala Arg Glu Ser Ser Trp
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Asp His Val Lys Thr Ser Ala Thr Asn Arg Phe Ser Arg Met His Cys
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Glu	Lys	His	Lys	Lys	Gly	Pro	Met	Glu	Thr	Gly	Leu	Phe	Pro	Gly	Ser
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Val	Phe	Pro	Ile	Leu	Asn	Thr	Leu	Glu	Asn	Ser	Pro	Glu	Ser	Phe	Leu
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Tyr	Cys	Cys	Asp	Phe	Ala	Ser	Gly	Ala	Val	Glu	Leu	Val	Lys	Ser	His
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	210					215					220				
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 16074

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Val	Leu	Thr	Phe	Leu	Pro	Ala	Lys	Ala	Leu	Leu	Arg	Val	Ala	Cys	Val
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Cys	Arg	Leu	Trp	Arg	Glu	Cys	Val	Arg	Arg	Val	Leu	Arg	Thr	His	Arg
	50					55				60					
Ser	Val	Thr	Trp	Ile	Ser	Ala	Gly	Leu	Ala	Glu	Ala	Gly	His	Leu	Glu
65					70				75					80	
Gly	His	Cys	Leu	Val	Arg	Val	Val	Ala	Glu	Glu	Leu	Glu	Asn	Val	Arg
			85					90					95		
Ile	Leu	Pro	His	Thr	Val	Leu	Tyr	Met	Ala	Asp	Ser	Glu	Thr	Phe	Ile
		100						105					110		
Ser	Leu	Glu	Glu	Cys	Arg	Gly	His	Lys	Arg	Ala	Arg	Lys	Arg	Thr	Ser
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Met	Glu	Thr	Ala	Leu	Ala	Leu	Glu	Lys	Leu	Phe	Pro	Lys	Gln	Cys	Gln
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		180						185					190		
Ile	Lys	Asp	Pro	Lys	Asn	Leu	Thr	Leu	Glu	Arg	His	Gln	Leu	Thr	Glu
	195					200						205			
Val	Gly	Leu	Leu	Asp	Asn	Pro	Glu	Leu	Arg	Val	Val	Leu	Val	Phe	Gly
	210					215					220				
Tyr	Asn	Cys	Cys	Lys	Val	Gly	Ala	Ser	Asn	Tyr	Leu	Gln	Gln	Val	Val
225				230					235					240	
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<212> DNA
<213> Homo sapiens

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<222> (126).. (848)

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<210> 16076
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<212> PRT

<213> Homo sapiens

<400> 16076

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35 40 45
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Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
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Asp Leu Asp Pro Asn Asn Val Ile Ile Glu Gln Glu Glu Arg Arg Arg
100 105 110
Arg Ser Phe Gln Asp Tyr Thr Gly Gln Lys Ile Thr Leu Glu Ala Val
115 120 125
Leu Asn Thr Thr Cys Lys Lys Cys Gly Cys Lys Gly His Phe Ala Lys
130 135 140
Asp Cys Phe Met Gln Pro Gly Gly Thr Lys Tyr Ser Leu Ile Pro Asp
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Lys Lys His Arg Asp Arg Lys Ser Ser Asp Ser Asp Ser Ser Asp Ser
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<210> 16077

<211> 1684

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (54).. (539)

<400> 16077

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<210> 16078

<211> 162

<212> PRT

<213> Homo sapiens

<400> 16078

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          20           25           30
Gly Met Thr Leu Asn Glu Lys Ser Val Gln Asn Ser Ile Thr Gln Trp
          35           40           45
Ile Val Asp Met Glu Gly Ala Pro Gly Thr Leu Tyr Glu Gly Glu Lys
          50           55           60
Phe Gln Leu Leu Phe Lys Phe Ser Ser Arg Tyr Pro Phe Asp Ser Pro
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Gln Val Met Phe Thr Gly Glu Asn Ile Pro Val His Pro His Val Tyr

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-10074/13211-

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Ser	Cys	Lys	Glu	Lys	Arg	Arg	Pro	Pro	Asp	Asn	Ser	Phe	Tyr	Val	Arg		
	130					135					140						
Thr	Cys	Asn	Lys	Asn	Pro	Lys	Lys	Thr	Lys	Trp	Trp	Tyr	His	Asp	Asp		
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<212> DNA
<213> Homo sapiens

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<210> 16080

<211> 216

<212> PRT

<213> Homo sapiens

<400> 16080

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35 40 45
Gln Leu Ile His His Gly Ala Val Ser Gln Val Ser Leu Tyr Ser Trp
50 55 60
Pro Val Pro Glu Ser Ala Leu Phe Ile Leu Ile Leu Thr Met Ser Ala
65 70 75 80
Gly Phe Trp Gln Pro Gly Pro Gly Gly Pro Pro Cys Arg Leu Cys Gly
85 90 95
Glu Ala Ser Arg Gly Arg Ala Pro Ser Arg Asp Glu Gly Ser Leu Leu
100 105 110
Leu Gly Ser Arg Arg Pro Arg Arg Asp Ala Ala Glu Arg Cys Ala Ala
115 120 125
Ala Leu Met Ala Ser Arg Arg Lys Ser Glu Ala Lys Gln Met Pro Arg
130 135 140
Ala Ala Pro Ala Thr Arg Val Thr Arg Arg Ser Thr Gln Glu Ser Leu
145 150 155 160
Thr Ala Gly Gly Thr Asp Leu Lys Arg Glu Leu His Pro Gln Pro Pro
165 170 175
Pro Met Arg Leu Leu Ala Pro Ser Gly His Leu Leu Leu Gln Gln Leu
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Pro Pro Leu Pro Leu Leu Leu His Pro His Thr Asn Gly His Gln Leu
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Ala Gln Pro His Ser Leu Ser Pro
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<210> 16081
<211> 1685
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (12).. (1007)

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<210> 16082
<211> 332
<212> PRT
<213> Homo sapiens

<400> 16082
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-10077/13211-

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      35           40           45
Arg Leu Leu Arg Cys Pro Pro Pro Pro Val Arg Arg Ser Glu Lys Pro
      50           55           60
Asn Trp Asp Tyr His Ala Glu Ile Gln Ala Phe Gly His Arg Leu Gln
      65           70           75           80
Glu Asn Phe Ser Leu Asp Leu Leu Lys Thr Ala Phe Val Asn Ser Cys
      85           90           95
Tyr Ile Lys Ser Glu Glu Ala Lys Arg Gln Gln Leu Gly Ile Glu Lys
      100          105          110
Glu Ala Val Leu Leu Asn Leu Lys Ser Asn Gln Glu Leu Ser Glu Gln
      115          120          125
Gly Thr Ser Phe Ser Gln Thr Cys Leu Thr Gln Phe Leu Glu Asp Glu
      130          135          140
Tyr Pro Asp Met Pro Thr Glu Gly Ile Lys Asn Leu Val Asp Phe Leu
      145          150          155          160
Thr Gly Glu Glu Val Val Cys His Val Ala Arg Asn Leu Ala Val Glu
      165          170          175
Gln Leu Thr Leu Ser Glu Glu Phe Pro Val Pro Pro Ala Val Leu Gln
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Gln Thr Phe Phe Ala Val Ile Gly Ala Leu Leu Gln Ser Ser Gly Pro
      195          200          205
Glu Arg Thr Ala Leu Phe Ile Arg Asp Phe Leu Ile Thr Gln Met Thr
      210          215          220
Gly Lys Glu Leu Phe Glu Met Arg Lys Ile Ile Asn Pro Met Gly Leu
      225          230          235          240
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      245          250          255
Leu Thr Arg Gln Ser Gly Gly Thr Thr Ala Leu Pro Leu Tyr Phe Val
      260          265          270
Gly Leu Tyr Cys Asp Lys Lys Leu Ile Ala Glu Gly Pro Gly Glu Thr
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Val Leu Val Ala Glu Glu Glu Ala Ala Arg Val Ala Leu Arg Lys Leu
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<212> PRT
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<400> 16084

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Ile Ser Phe	Thr Phe Gln	Met Ala Val	Gln Arg Cys Val Val Arg Ile
50	55	60	
Arg Ser Asp	Leu Lys Ala	Glu Ala Leu	Ala Ser Ala Ile Ala Ser Thr
65	70	75	80
Lys Val Met	Lys Ala Gln	Gln Val Val	Lys Ser Glu Ser Gly Glu Glu
85	90	95	
Met Leu Val	Pro Phe Gln	Asp Thr Pro	Val Glu Val Glu Gln Asn Thr
100	105	110	
Glu Leu Pro	Asp Tyr Leu	Pro Glu Asp	Glu Ser Pro Thr Lys Glu Gln
115	120	125	
Asp Lys Ala	Val Ser Arg	Val Gly Ser	His Pro Glu Gly Gly Ala Ser
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 <211> 1847
 <212> DNA
 <213> Homo sapiens

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Ala	Gln	Ile	Gln	Glu	Met	Lys	Lys	Arg	Glu	Lys	Glu	Glu	Met	Lys	Lys
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Lys	Arg	Glu	Met	Asp	Glu	Leu	Arg	Ser	Tyr	Ser	Ser	Leu	Met	Lys	Val
			180				185						190		
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<220>
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<400> 16087

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 Lys Gln Leu Val Glu Glu Lys Met Glu Arg Asp Ala Gln Phe Thr Gln
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 Arg Lys Ala Glu Arg Ala Thr Leu Arg Ser His Phe Arg Asp Lys Tyr
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 Arg Leu Pro Lys Asn Glu Thr Asp Glu Ser Gln Ile Gln Met Ala Gly
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 Gly Asp Val Glu Leu Pro Arg Glu Leu Ala Lys Met Ile Glu Glu Asp
 100 105 110
 Thr Glu Glu Glu Glu Lys Ala Ser Val Leu Gly Gln Leu Ala Ser
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 <213> Homo sapiens

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Thr	Pro	Leu	Met	Glu	Ala	Ala	Ser	Gly	Gly	Tyr	Ala	Glu	Val	Gly	Arg
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Ser	Arg	Asp	Thr	Ala	Leu	Thr	Ile	Ala	Ala	Asp	Lys	Gly	His	Tyr	Lys
			100					105					110		
Phe	Cys	Glu	Leu	Leu	Ile	His	Arg	Gly	Ala	His	Ile	Asp	Val	Arg	Asn
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Lys	Lys	Gly	Asn	Thr	Pro	Leu	Trp	Leu	Ala	Ser	Asn	Gly	Gly	His	Phe
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	210					215					220				
Gln	Gln	Ala	Ala	Glu	Ala	Asn	Lys	Asn	Ala	Ser	Ile	Leu	Leu	Lys	Glu
225					230					235					240
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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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		35					40					45			
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	50					55					60				
Phe	Asp	Arg	Gly	Thr	Ala	Ser	Phe	Pro	Gln	Thr	Ile	Tyr	Cys	Gly	Phe
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Asp	Pro	Thr	Ala	Asp	Ser	Leu	His	Val	Gly	His	Leu	Leu	Ala	Leu	Leu
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Gly	Leu	Phe	His	Leu	Gln	Arg	Ala	Gly	His	Asn	Val	Ile	Ala	Leu	Val
			100					105					110		
Gly	Gly	Ala	Thr	Ala	Arg	Leu	Gly	Asp	Pro	Ser	Gly	Arg	Thr	Lys	Glu
		115					120					125			
Arg	Glu	Ala	Leu	Glu	Thr	Glu	Arg	Val	Arg	Ala	Asn	Ala	Arg	Ala	Leu
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Phe	Arg	Met	Gly	Thr	Leu	Leu	Ser	Arg	Gln	Ser	Val	Gln	Leu	Arg	Leu
		195					200					205			
Lys	Ser	Pro	Glu	Gly	Met	Ser	Leu	Ala	Glu	Phe	Phe	Tyr	Gln	Val	Leu
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	225				230					235					240
Gln	Leu	Gly	Gly	Ser	Asp	Gln	Leu	Gly	Asn	Ile	Met	Ser	Gly	Tyr	Glu
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Leu	Ile	Thr	Ser	Thr	Thr	Gly	Ala	Lys	Leu	Gly	Lys	Ser	Ala	Gly	Asn
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Val Lys Glu Pro Glu Arg Arg Gly Pro Gln Lys Arg Leu Ala Ala Glu				
	340		345	350
Val Thr Lys Leu Val His Gly Arg Glu Gly Leu Asp Ser Ala Lys Arg				
	355		360	365
Cys Thr Gln Ala Leu Tyr His Ser Ser Ile Asp Ala Leu Glu Val Met				
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Ser Asp Gln Glu Leu Lys Glu Leu Phe Lys Glu Ala Pro Phe Ser Glu				
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Phe Phe Leu Asp Pro Gly Thr Ser Val Leu Asp Thr Cys Arg Lys Ala				
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Asn Ala Ile Pro Asp Gly Pro Arg Gly Tyr Arg Met Ile Thr Glu Gly				
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Gly Val Ser Ile Asn His Gln Gln Val Thr Asn Pro Glu Ser Val Leu				
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 <211> 532
 <212> PRT
 <213> Homo sapiens

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<400> 16094
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Ser Leu Arg Arg Ala Gly Thr Ala Arg Leu Phe Phe Leu Ser His Met
             20             25             30
His Ser Asp His Thr Val Gly Leu Ser Ser Thr Trp Ala Arg Pro Leu
             35             40             45
Tyr Cys Ser Pro Ile Thr Ala His Leu Leu His Arg His Leu Gln Val
             50             55             60
Ser Lys Gln Trp Ile Gln Ala Leu Glu Val Gly Glu Ser His Val Leu
             65             70             75             80
Pro Leu Asp Glu Ile Gly Gln Glu Thr Met Thr Val Thr Leu Leu Asp
             85             90             95
Ala Asn His Cys Pro Gly Ser Val Met Phe Leu Phe Glu Gly Tyr Phe
             100            105            110
Gly Thr Ile Leu Tyr Thr Gly Asp Phe Arg Tyr Thr Pro Ser Met Leu
             115            120            125
Lys Glu Pro Ala Leu Thr Leu Gly Lys Gln Ile His Thr Leu Tyr Leu
             130            135            140

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008220" 59453960

Asp	Asn	Thr	Asn	Cys	Asn	Pro	Ala	Leu	Val	Leu	Pro	Ser	Arg	Gln	Glu
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				165					170					175	
Ile	Lys	Ile	Gly	Leu	Tyr	Ser	Leu	Gly	Lys	Glu	Ser	Leu	Leu	Glu	Gln
			180					185					190		
Leu	Ala	Leu	Glu	Phe	Gln	Thr	Trp	Val	Val	Leu	Ser	Pro	Arg	Arg	Leu
		195					200					205			
Glu	Leu	Val	Gln	Leu	Leu	Gly	Leu	Ala	Asp	Val	Phe	Thr	Val	Glu	Glu
	210					215					220				
Lys	Ala	Gly	Arg	Ile	His	Ala	Val	Asp	His	Met	Glu	Ile	Cys	His	Ser
225				230						235					240
Asn	Met	Leu	Arg	Trp	Asn	Gln	Thr	His	Pro	Thr	Ile	Ala	Ile	Leu	Pro
				245					250					255	
Thr	Ser	Arg	Lys	Ile	His	Ser	Ser	His	Pro	Asp	Ile	His	Val	Ile	Pro
			260					265					270		
Tyr	Ser	Asp	His	Ser	Ser	Tyr	Ser	Glu	Leu	Arg	Ala	Phe	Val	Ala	Ala
		275					280					285			
Leu	Lys	Pro	Cys	Gln	Val	Val	Pro	Ile	Val	Ser	Arg	Arg	Pro	Cys	Gly
	290					295					300				
Gly	Phe	Gln	Asp	Ser	Leu	Ser	Pro	Arg	Ile	Ser	Val	Pro	Leu	Ile	Pro
305					310					315					320
Asp	Ser	Val	Gln	Gln	Tyr	Met	Ser	Ser	Ser	Ser	Arg	Lys	Pro	Ser	Leu
				325					330					335	
Leu	Trp	Leu	Leu	Glu	Arg	Arg	Leu	Lys	Arg	Pro	Arg	Thr	Gln	Gly	Val
			340					345					350		
Val	Phe	Glu	Ser	Pro	Glu	Glu	Ser	Ala	Asp	Gln	Ser	Gln	Ala	Asp	Arg
		355					360					365			
Asp	Ser	Lys	Lys	Ala	Lys	Lys	Glu	Lys	Leu	Ser	Pro	Trp	Pro	Ala	Asp
	370					375					380				
Leu	Glu	Lys	Gln	Pro	Ser	His	His	Pro	Leu	Arg	Ile	Lys	Lys	Gln	Leu
385					390					395					400
Phe	Pro	Asp	Leu	Tyr	Ser	Lys	Glu	Trp	Asn	Lys	Ala	Val	Pro	Phe	Cys
				405					410					415	
Glu	Ser	Gln	Lys	Arg	Val	Thr	Met	Leu	Thr	Ala	Pro	Leu	Gly	Phe	Ser
			420					425					430		
Val	His	Leu	Arg	Ser	Thr	Asp	Glu	Glu	Phe	Ile	Ser	Gln	Lys	Thr	Arg
		435					440					445			
Glu	Glu	Ile	Gly	Leu	Gly	Ser	Pro	Leu	Val	Pro	Met	Gly	Asp	Asp	Asp
	450					455					460				
Gly	Gly	Pro	Glu	Ala	Thr	Gly	Asn	Gln	Ser	Ala	Trp	Met	Gly	His	Gly
465					470					475					480
Ser	Pro	Leu	Ser	His	Ser	Ser	Lys	Gly	Thr	Pro	Leu	Leu	Ala	Thr	Glu
				485					490					495	
Phe	Arg	Gly	Leu	Ala	Leu	Lys	Tyr	Leu	Leu	Thr	Pro	Val	Asn	Phe	Phe
			500					505					510		
Gln	Ala	Gly	Tyr	Ser	Ser	Arg	Arg	Phe	Asp	Gln	Gln	Val	Glu	Lys	Tyr
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008240" 69462960

His Lys Pro Cys
530

<210> 16095
<211> 1898
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (168).. (1817)

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aggaagcacg ctcccagcgg caccacaatg cccacttcgg ctctgacctt gtccgagcgt 480
ctatgcgagc gaagaagagc accaggggag accaggctcc aggccacgac agggaggctg 540
aggctgctgt gaaagagaag gaagaggggc cagagcccag gctcaccatt gatgaggccc 600
ctcaggagag gctcagggag actgaggctt cagatcctga ggaggogtcc caggcccagg 660
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ccagccgcca gcgtacaagg gttgtgcgac gcagcctcag ccctgtgttc aatcacacca 1560
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acctggcccc caggacgtag cccaccaag cctctctctc tggacccccca tctcagggcc 1860
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009220" 69462960

<210> 16096
 <211> 550
 <212> PRT
 <213> Homo sapiens

<400> 16096

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			20					25					30		
Asp	Leu	Ser	Phe	Leu	Thr	Glu	Glu	Gln	Glu	Ala	Ile	Ala	Gly	Val	
		35					40				45				
Leu	Gln	Arg	Asp	Ala	Arg	Leu	Arg	Gln	Leu	Glu	Glu	Gly	Arg	Val	Ser
	50					55				60					
Lys	Leu	Arg	Ala	Ser	Val	Ala	Asp	Pro	Gly	Gln	Leu	Lys	Ile	Leu	Thr
65					70					75					80
Gly	Asp	Trp	Phe	Gln	Glu	Ala	Arg	Ser	Gln	Arg	His	His	Asn	Ala	His
				85					90					95	
Phe	Gly	Ser	Asp	Leu	Val	Arg	Ala	Ser	Met	Arg	Arg	Lys	Lys	Ser	Thr
			100					105					110		
Arg	Gly	Asp	Gln	Ala	Pro	Gly	His	Asp	Arg	Glu	Ala	Glu	Ala	Ala	Val
		115					120					125			
Lys	Glu	Lys	Glu	Glu	Gly	Pro	Glu	Pro	Arg	Leu	Thr	Ile	Asp	Glu	Ala
	130					135					140				
Pro	Gln	Glu	Arg	Leu	Arg	Glu	Thr	Glu	Ala	Ser	Asp	Pro	Glu	Glu	Ala
145					150					155					160
Ser	Gln	Ala	Gln	Glu	Asp	Pro	Gly	Gln	Gly	Asp	Gln	Gln	Val	Cys	Ala
				165					170					175	
Glu	Glu	Ala	Asp	Pro	Glu	Leu	Glu	Pro	Ala	Ser	Gly	Gly	Glu	Gln	Glu
			180					185					190		
Pro	Arg	Pro	Gln	Gln	Ala	Gln	Thr	Lys	Ala	Ala	Ser	Gln	Ile	Leu	Glu
		195					200					205			
Asn	Gly	Glu	Glu	Ala	Pro	Gly	Pro	Asp	Pro	Ser	Leu	Asp	Arg	Met	Leu
	210					215					220				
Ser	Ser	Ser	Ser	Ser	Val	Ser	Ser	Leu	Asn	Ser	Ser	Thr	Leu	Ser	Gly
225					230					235					240
Ser	Gln	Met	Ser	Leu	Ser	Gly	Asp	Ala	Glu	Ala	Val	Gln	Val	Arg	Gly
			245						250					255	
Ser	Val	His	Phe	Ala	Leu	His	Tyr	Glu	Pro	Gly	Ala	Ala	Glu	Leu	Arg
			260					265					270		
Val	His	Val	Ile	Gln	Cys	Gln	Gly	Leu	Ala	Ala	Ala	Arg	Arg	Arg	Arg
		275					280					285			
Ser	Asp	Pro	Tyr	Val	Lys	Ser	Tyr	Leu	Leu	Pro	Asp	Lys	Gln	Ser	Lys
	290					295					300				
Arg	Lys	Thr	Ala	Val	Lys	Lys	Arg	Asn	Leu	Asn	Pro	Val	Phe	Asn	Glu
305					310					315					320
Thr	Leu	Arg	Tyr	Ser	Val	Pro	Gln	Ala	Glu	Leu	Gln	Gly	Arg	Val	Leu
				325					330					335	

008220" 69452360

-10091/13211-

Ser Leu Ser Val Trp His Arg Glu Ser Leu Gly Arg Asn Ile Phe Leu
 340 345 350
 Gly Glu Val Glu Val Pro Leu Asp Thr Trp Asp Trp Gly Ser Glu Pro
 355 360 365
 Thr Trp Leu Pro Leu Gln Pro Arg Val Pro Pro Ser Pro Asp Asp Leu
 370 375 380
 Pro Ser Arg Gly Leu Leu Ala Leu Ser Leu Lys Tyr Val Pro Ala Gly
 385 390 395 400
 Ser Glu Gly Ala Gly Leu Pro Pro Ser Gly Glu Leu His Phe Trp Val
 405 410 415
 Lys Glu Ala Arg Asp Leu Leu Pro Leu Arg Ala Gly Ser Leu Asp Thr
 420 425 430
 Tyr Val Gln Cys Phe Val Leu Pro Asp Asp Ser Gln Ala Ser Arg Gln
 435 440 445
 Arg Thr Arg Val Val Arg Arg Ser Leu Ser Pro Val Phe Asn His Thr
 450 455 460
 Met Val Tyr Asp Gly Phe Gly Pro Ala Asp Leu Arg Gln Ala Cys Ala
 465 470 475 480
 Glu Leu Ser Leu Trp Asp His Gly Ala Leu Ala Asn Arg Gln Leu Gly
 485 490 495
 Gly Thr Arg Leu Ser Leu Gly Thr Gly Ser Ser Tyr Gly Leu Gln Val
 500 505 510
 Pro Trp Met Asp Ser Thr Pro Glu Glu Lys Gln Leu Trp Gln Ala Leu
 515 520 525
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 530 535 540
 Asn Leu Ala Pro Arg Thr
 545 550

<210> 16097

<211> 1759

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (429).. (1259)

<400> 16097

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 gaggcgccca ccacttcacg acaccggagc gaaccgggcg ccagaggctg cgacccccct 180
 gccccgaatc ctgccggtgg gagggtgctgc atttgaacca aacggccttc gcgggcagca 240
 gccgtcgccc cgcagtcacc gggctcccaa gggcctgtga ccgacgccgc cctccgcgtc 300
 ttggtccccg aagccccggg aaccatccgc cctcgggaga ccatgctgca gatgcgagga 360
 aagccgttct ctggaacatc ggaattctaa ccccagggtg aaggactcac gacaggcgag 420
 gggcagacat gctgaattcc acgggcgaac tggagttttc gaacgaagaa gatcccagga 480

009240" 69462960

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gaatcgaaaa gtcggcacag aaagtottaa tcaagtatgg gaatgaaccc ctgcggtcct 660
tgtccgagtc tgaggatcag tccittcagc gtttgtotta tgagctggct ttcagtgcc 720
tgaaatatca agatattttg gaaactatat tgatagacag ctgtatcttc ccaagtacca 780
caacaccaga tcatgtgagc agtcttatta ttgtgatgct atatgatttc caagatagaa 840
aatttcaaac tctgttcctt tctgataatg aagagcccat atcagaagtt caagaagtag 900
agaaccttct taacagtttt aagataaaat tggctgcagc attggcaaga tctcgaatca 960
agcatgatgc cctttcaatt taccacatcc ttccagaaac agttaggaaa caggaactaa 1020
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aaaacaattg taatagtttt tcataatttc tttaatatag tottatagct ttgatttgta 1680
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gaacgaaaat aaaaggtat                                     1759

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<210> 16098
 <211> 277
 <212> PRT
 <213> Homo sapiens

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<400> 16098
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Glu Ile Ile Ser Gln Leu Thr Ser Leu Pro Leu Ser Gly Gly Lys Ser
          20             25             30
Ser Ala Gly Val Pro Glu Lys Thr Gly Tyr Pro Asp Ser Val Tyr Val
          35             40             45
Met Ala Ala Asn Ile Phe Gln Gly Ile Arg Ile Glu Lys Ser Ala Gln
          50             55             60
Lys Val Leu Ile Lys Tyr Gly Asn Glu Pro Leu Arg Ser Leu Ser Glu
          65             70             75             80
Ser Glu Asp Gln Ser Phe Gln Arg Leu Ser Tyr Glu Leu Ala Phe Ser
          85             90             95
Ala Leu Lys Tyr Gln Asp Ile Leu Glu Thr Ile Leu Ile Asp Ser Cys
          100            105            110
Ile Phe Pro Ser Thr Thr Thr Pro Asp His Leu Ser Ser Leu Ile Ile
          115            120            125
Val Met Leu Tyr Asp Phe Gln Asp Arg Lys Phe Gln Thr Arg Val Leu
          130            135            140

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009220"69462960

-10093/13211-

Ser Asp Asn Glu Glu Pro Ile Ser Glu Val Gln Glu Val Glu Asn Leu
145 150 155 160
Leu Asn Ser Phe Lys Ile Lys Leu Ala Ala Ala Leu Ala Arg Cys Arg
165 170 175
Ile Lys His Asp Ala Leu Ser Ile Tyr His Ile Leu Pro Glu Thr Val
180 185 190
Arg Lys Gln Glu Leu Arg Ala Ser Thr Leu Pro Leu Tyr Ala Trp Ile
195 200 205
Asn Thr Cys Lys Ile Ser Pro Glu Glu Val Tyr Asn Asn Leu Lys Arg
210 215 220
Arg Gly Tyr Asn Lys Val Lys Ser Val Leu His Ile Asp Asp Lys Val
225 230 235 240
Phe Ala Val Asp Gln His Cys Tyr Asp Val Leu Ile Phe Pro Ser His
245 250 255
Leu Lys Asn Asp Leu Ile Asn Ile Asp Leu Phe Lys Asp Tyr Lys Leu
260 265 270
Ile Phe Gln Val Asn
275

<210> 16099
<211> 1757
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (208).. (1392)

<400> 16099
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ctgggcagca agaaggagct caagtccatg ccttccatca cctacctctc aggtttgctg 240
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09629459.072800

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<210> 16100
 <211> 395
 <212> PRT
 <213> Homo sapiens

<400> 16100

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			20					25					30		
Gly	Arg	Cys	Pro	Ser	Thr	Cys	His	Leu	Cys	Arg	Arg	Pro	Gly	Lys	Glu
		35					40					45			
Gln	Leu	Ser	Pro	Thr	Pro	Val	Leu	Leu	Glu	Ile	Asn	Arg	Val	Val	Pro
	50					55					60				
Leu	Tyr	Thr	Leu	Ile	Gln	Asp	Asn	Gly	Thr	Lys	Glu	Ala	Phe	Lys	Ser
	65				70					75				80	
Ala	Pro	Met	Ser	Ser	Tyr	Trp	Cys	Ser	Gly	Lys	Gly	Asp	Val	Ile	Asp
			85						90					95	
Asp	Trp	Cys	Arg	Cys	Asp	Leu	Ser	Ala	Phe	Asp	Ala	Asn	Gly	Leu	Pro
			100					105					110		
Asn	Cys	Ser	Pro	Leu	Leu	Gln	Pro	Val	Leu	Arg	Leu	Ser	Pro	Thr	Val
		115					120					125			
Glu	Pro	Ser	Ser	Thr	Val	Val	Ser	Leu	Glu	Trp	Val	Asp	Val	Gln	Pro
	130					135					140				
Ala	Ile	Gly	Thr	Lys	Val	Ser	Asp	Tyr	Ile	Leu	Gln	His	Lys	Lys	Val
	145				150					155					160
Asp	Glu	Tyr	Thr	Asp	Thr	Asp	Leu	Tyr	Thr	Gly	Glu	Phe	Leu	Ser	Phe
			165						170					175	
Ala	Asp	Asp	Leu	Leu	Ser	Gly	Leu	Gly	Thr	Ser	Cys	Val	Ala	Ala	Gly
			180					185					190		
Arg	Ser	His	Gly	Glu	Val	Pro	Glu	Val	Ser	Ile	Tyr	Ser	Val	Ile	Phe
		195					200					205			
Lys	Cys	Leu	Glu	Pro	Asp	Gly	Leu	Tyr	Lys	Phe	Thr	Leu	Tyr	Ala	Val
	210					215					220				

Asp	Thr	Arg	Gly	Arg	His	Ser	Glu	Leu	Ser	Thr	Val	Thr	Leu	Arg	Thr
225					230					235					240
Ala	Cys	Pro	Leu	Val	Asp	Asp	Asn	Lys	Ala	Glu	Glu	Ile	Ala	Asp	Lys
				245					250					255	
Ile	Tyr	Asn	Leu	Tyr	Asn	Gly	Tyr	Thr	Ser	Gly	Lys	Glu	Gln	Gln	Met
			260					265					270		
Ala	Tyr	Asn	Thr	Leu	Met	Glu	Val	Ser	Ala	Ser	Met	Leu	Phe	Arg	Val
		275					280					285			
Gln	His	His	Tyr	Asn	Ser	His	Tyr	Glu	Lys	Phe	Gly	Asp	Phe	Val	Trp
	290					295					300				
Arg	Ser	Glu	Asp	Glu	Leu	Gly	Pro	Arg	Lys	Ala	His	Leu	Ile	Leu	Arg
305					310					315					320
Arg	Leu	Glu	Arg	Val	Ser	Ser	His	Cys	Ser	Ser	Leu	Leu	Arg	Ser	Ala
				325					330					335	
Tyr	Ile	Gln	Ser	Arg	Val	Glu	Thr	Val	Pro	Tyr	Leu	Phe	Cys	Arg	Ser
			340					345					350		
Glu	Glu	Val	Arg	Pro	Ala	Gly	Met	Val	Trp	Tyr	Ser	Ile	Leu	Lys	Asp
		355					360					365			
Thr	Lys	Ile	Thr	Cys	Glu	Glu	Lys	Met	Val	Ser	Met	Ala	Arg	Asn	Thr
	370					375					380				
Tyr	Tyr	Leu	Thr	Leu	Ser	Lys	Val	Ser	Pro	Phe					
385					390					395					

<210> 16101
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (17).. (1198)

<400> 16101
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 aggtggcgac agtgctatga gggccttcca gaacacggca actgcatgtg caccagtatc 180
 acattatcga gctgttgaaa gtgtggattc aagtgaagaa agtttttctg attcagatga 240
 tgatagctgt ctttggaaac gcaaacgaca gaaatgtttt aaccctcctc ccaaaccaga 300
 gccttttcag tttggccaga gcagtcagaa accacctgtt gctggaggaa agaagattaa 360
 caacatatgg ggtgctgtgc tgcaggaaca gaatcaagat gcagtggcca ctgaacttgg 420
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 agatgaatat atgcatgggt gcaaaaaaat gggatcaaaag gaagaggaaa atgggcaagg 600
 tcattcctaaa aggaacgac ctgtcaaaaga caggctaggg aacagaccag aatgaacta 660
 taaaggctga tacgagatca cagcggaaga ttctcaagag aaagtggctg atgaaatttc 720
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 caaaaaggca attgaacttc tgatggaaac cgctgaagtt gaacaaaatg gtggtctctt 840

tataatgaat ggtagtcgaa gaagaacacc aggtggagtt tttctgaatc tcttgaaaaa 900
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<210> 16102
 <211> 394
 <212> PRT
 <213> Homo sapiens

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 Lys Val Leu Gly Gly Asp Ser Ala Met Arg Ala Phe Gln Asn Thr Ala
 35 40 45
 Thr Ala Cys Ala Pro Val Ser His Tyr Arg Ala Val Glu Ser Val Asp
 50 55 60
 Ser Ser Glu Glu Ser Phe Ser Asp Ser Asp Asp Ser Cys Leu Trp
 65 70 75 80
 Lys Arg Lys Arg Gln Lys Cys Phe Asn Pro Pro Pro Lys Pro Glu Pro
 85 90 95
 Phe Gln Phe Gly Gln Ser Ser Gln Lys Pro Pro Val Ala Gly Gly Lys
 100 105 110
 Lys Ile Asn Asn Ile Trp Gly Ala Val Leu Gln Glu Gln Asn Gln Asp
 115 120 125
 Ala Val Ala Thr Glu Leu Gly Ile Leu Gly Met Glu Gly Thr Ile Asp
 130 135 140
 Arg Ser Arg Gln Ser Glu Thr Tyr Asn Tyr Leu Leu Ala Lys Lys Leu
 145 150 155 160
 Arg Lys Glu Ser Gln Glu His Thr Lys Asp Leu Asp Lys Glu Leu Asp
 165 170 175
 Glu Tyr Met His Gly Gly Lys Lys Met Gly Ser Lys Glu Glu Asn
 180 185 190

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Gly Gln Gly His Leu Lys Arg Lys Arg Pro Val Lys Asp Arg Leu Gly
195 200 205
Asn Arg Pro Glu Met Asn Tyr Lys Gly Arg Tyr Glu Ile Thr Ala Glu
210 215 220
Asp Ser Gln Glu Lys Val Ala Asp Glu Ile Ser Phe Arg Leu Gln Glu
225 230 235 240
Pro Lys Lys Asp Leu Ile Ala Arg Val Val Arg Ile Ile Gly Asn Lys
245 250 255
Lys Ala Ile Glu Leu Leu Met Glu Thr Ala Glu Val Glu Gln Asn Gly
260 265 270
Gly Leu Phe Ile Met Asn Gly Ser Arg Arg Arg Thr Pro Gly Gly Val
275 280 285
Phe Leu Asn Leu Leu Lys Asn Thr Pro Ser Ile Ser Glu Glu Gln Ile
290 295 300
Lys Asp Ile Phe Tyr Ile Glu Asn Gln Lys Glu Tyr Glu Asn Lys Lys
305 310 315 320
Ala Ala Arg Lys Arg Arg Thr Gln Val Leu Gly Lys Lys Met Lys Gln
325 330 335
Ala Ile Lys Ser Leu Asn Phe Gln Glu Asp Asp Asp Thr Ser Arg Glu
340 345 350
Thr Phe Ala Ser Asp Thr Asn Glu Ala Leu Ala Ser Leu Asp Glu Ser
355 360 365
Gln Glu Gly His Ala Glu Ala Lys Leu Glu Ala Glu Glu Ala Ile Glu
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Val Asp His Ser His Asp Leu Asp Ile Phe
385 390

<210> 16103
<211> 1938
<212> DNA
<213> Homo sapiens

<220>
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ggtgtgccga agctctggtc agtgccatga tccggcagga gogctccaca tcctaccagg 180
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aggagacggt cagagtccaa ggtccgggta tcttaccagg cctggacagc gagtccgcct 300
ccagcagcat ccgcttcagc aaggcctgcc tgaagaacgt cttctcggtc ctactcatct 360
tcatttacct gctgctcatg gctgtggccg tcttctggt ctaccggacc atcacagact 420
ttcgtgagaa actcaagcac cctgtcatgt ctgtgtctta caaggaagtg gatcgctatg 480
atgccccagg tattgccttg taccocggtc aggccagtt gctcagctgt aagcaccatt 540
acgaggtcat tcctcctctg acaagccctg gccagccggg tgacatgaat tgcaccaccc 600

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gtagtgagga cttcagcgcc attgattacc tctctttctc ttctttccag gagttcctgc 780
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ggcgggaagc agtggagtgc cggcaggaga caagtgtggt taactacatt gaccagaggc 960
cagctgccaa aaaaagtgtt caattgtttt ttgtggtctt tgaatggaaa gatcctttca 1020
tccagaaagt ccaagatata gtcactgcca atccttggaa cacaattgct cttctctgtg 1080
gcgccttctt ggcattattt aaagcagcag agtttgccaa actgagtata aaatggatga 1140
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aacagcatgt aaaactggaa cttctaacc cgtcccaaaa gaggcgggtg agagcctaata 1380
agaagagact aatggataaa cctacaagtt atttaaatat tttaaattatt aataaacttt 1440
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cttgtccggc tagaatgttt gttgatgtat gagtttagat taacactcaa aagcactagg 1860
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<210> 16104
 <211> 350
 <212> PRT
 <213> Homo sapiens

<400> 16104

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Leu	Val	Gln	Val	Val	Glu	Asn	Ser	Glu	Leu	Ala	Asp	Glu	Gln	Asp	Lys
		20						25					30		
Glu	Thr	Val	Arg	Val	Gln	Gly	Pro	Gly	Ile	Leu	Pro	Gly	Leu	Asp	Ser
		35				40					45				
Glu	Ser	Ala	Ser	Ser	Ser	Ile	Arg	Phe	Ser	Lys	Ala	Cys	Leu	Lys	Asn
	50					55					60				
Val	Phe	Ser	Val	Leu	Leu	Ile	Phe	Ile	Tyr	Leu	Leu	Leu	Met	Ala	Val
	65				70					75					80
Ala	Val	Phe	Leu	Val	Tyr	Arg	Thr	Ile	Thr	Asp	Phe	Arg	Glu	Lys	Leu
			85						90					95	
Lys	His	Pro	Val	Met	Ser	Val	Ser	Tyr	Lys	Glu	Val	Asp	Arg	Tyr	Asp
		100						105				110			
Ala	Pro	Gly	Ile	Ala	Leu	Tyr	Pro	Gly	Gln	Ala	Gln	Leu	Ser	Cys	
	115					120					125				
Lys	His	His	Tyr	Glu	Val	Ile	Pro	Pro	Leu	Thr	Ser	Pro	Gly	Gln	Pro

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130						135						140					
Gly	Asp	Met	Asn	Cys	Thr	Thr	Gln	Arg	Ile	Asn	Tyr	Thr	Asp	Pro	Phe		
145						150				155					160		
Ser	Asn	Gln	Thr	Val	Lys	Ser	Ala	Leu	Ile	Val	Gln	Gly	Pro	Arg	Glu		
				165					170					175			
Val	Lys	Lys	Arg	Glu	Leu	Val	Phe	Leu	Gln	Phe	Arg	Leu	Asn	Lys	Ser		
			180					185					190				
Ser	Glu	Asp	Phe	Ser	Ala	Ile	Asp	Tyr	Leu	Leu	Phe	Ser	Ser	Phe	Gln		
		195					200					205					
Glu	Phe	Leu	Gln	Ser	Pro	Asn	Arg	Val	Gly	Phe	Met	Gln	Ala	Cys	Glu		
210						215					220						
Ser	Ala	Tyr	Ser	Ser	Trp	Lys	Phe	Ser	Gly	Gly	Phe	Arg	Thr	Trp	Val		
225					230					235					240		
Lys	Met	Ser	Leu	Val	Lys	Thr	Lys	Glu	Glu	Asp	Gly	Arg	Glu	Ala	Val		
			245					250						255			
Glu	Phe	Arg	Gln	Glu	Thr	Ser	Val	Val	Asn	Tyr	Ile	Asp	Gln	Arg	Pro		
			260					265					270				
Ala	Ala	Lys	Lys	Ser	Ala	Gln	Leu	Phe	Phe	Val	Val	Phe	Glu	Trp	Lys		
		275				280						285					
Asp	Pro	Phe	Ile	Gln	Lys	Val	Gln	Asp	Ile	Val	Thr	Ala	Asn	Pro	Trp		
290					295					300							
Asn	Thr	Ile	Ala	Leu	Leu	Cys	Gly	Ala	Phe	Leu	Ala	Leu	Phe	Lys	Ala		
305				310					315						320		
Ala	Glu	Phe	Ala	Lys	Leu	Ser	Ile	Lys	Trp	Met	Ile	Lys	Ile	Arg	Lys		
			325					330						335			
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		340				345							350				

<210> 16105
<211> 1793
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (15).. (818)

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acagaagcag ggagtcctcat ggttgtcctg aggtgactgt aatcaatgag agactgaaga 180
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cagttatatg tccttattgt gagaagaatt tttgcctgag acaccgtcat cagtcagatc 300
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aagacattat tgattccaag acaggagaaa cagcaagtaa acgatggaaa ggtgccaaaa 420
atagtgaac agctgcaaag gttgcattga tgaaattaaa gatgcatgct gatggcgata 480
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tgtgtcacat tacttcagga gaagccttac ccttggatca tactttggaa acctggattg 720
ctaaggagga ttgtccttta tataatgggtg gaaatataat cttggaatat ctcaatgatg 780
aagaacaatt ctgtaaaaat gttgaatctt acttgggaata gtcattcaaa gattcaagtc 840
agaaatcaca gggaaaattc tattacatgt ttaagtccat ttattttact acaaatacta 900
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<210> 16106
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 16106

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Gln	Arg	Asp	Phe	Leu	Pro	Phe	Val	Cys	Asp	Asp	Cys	Ser	Gly	Ile	Phe
			20					25					30		
Cys	Leu	Glu	His	Arg	Ser	Arg	Glu	Ser	His	Gly	Cys	Pro	Glu	Val	Thr
			35				40					45			
Val	Ile	Asn	Glu	Arg	Leu	Lys	Thr	Asp	Gln	His	Thr	Ser	Tyr	Pro	Cys
		50				55					60				
Ser	Phe	Lys	Asp	Cys	Ala	Glu	Arg	Glu	Leu	Val	Ala	Val	Ile	Cys	Pro
65					70					75					80
Tyr	Cys	Glu	Lys	Asn	Phe	Cys	Leu	Arg	His	Arg	His	Gln	Ser	Asp	His
				85					90					95	
Glu	Cys	Glu	Lys	Leu	Glu	Ile	Pro	Lys	Pro	Arg	Met	Ala	Ala	Thr	Gln
			100					105					110		
Lys	Leu	Val	Lys	Asp	Ile	Ile	Asp	Ser	Lys	Thr	Gly	Glu	Thr	Ala	Ser
		115					120					125			
Lys	Arg	Trp	Lys	Gly	Ala	Lys	Asn	Ser	Glu	Thr	Ala	Ala	Lys	Val	Ala
	130					135					140				
Leu	Met	Lys	Leu	Lys	Met	His	Ala	Asp	Gly	Asp	Lys	Ser	Leu	Pro	Gln

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145 150 155 160
Thr Glu Arg Ile Tyr Phe Gln Val Phe Leu Pro Lys Gly Ser Lys Glu
165 170 175
Lys Ser Lys Pro Met Leu Phe Cys His Arg Trp Ser Ile Gly Lys Ala
180 185 190
Ile Asp Phe Ala Ala Ser Leu Ala Arg Leu Lys Asn Asp Asn Asn Lys
195 200 205
Phe Thr Ala Lys Lys Leu Arg Leu Cys His Ile Thr Ser Gly Glu Ala
210 215 220
Leu Pro Leu Asp His Thr Leu Glu Thr Trp Ile Ala Lys Glu Asp Cys
225 230 235 240
Pro Leu Tyr Asn Gly Gly Asn Ile Ile Leu Glu Tyr Leu Asn Asp Glu
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Glu Gln Phe Cys Lys Asn Val Glu Ser Tyr Leu Glu
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<210> 16107
<211> 1723
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (342).. (1721)

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<210> 16108

<211> 460

<212> PRT

<213> Homo sapiens

<400> 16108

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          20           25           30
Ala Ile Val Val Ser Val Gly Val Asp Glu Glu Ile Val Tyr Ala Lys
          35           40           45
Ser Thr Ala Leu Gln Thr Trp Leu Phe Gly Tyr Glu Leu Thr Asp Thr
          50           55           60
Ile Met Val Phe Cys Asp Asp Lys Ile Ile Phe Met Ala Ser Lys Lys
          65           70           75           80
Lys Val Glu Phe Leu Lys Gln Ile Ala Asn Thr Lys Gly Asn Glu Asn
          85           90           95
Ala Asn Gly Ala Pro Ala Ile Thr Leu Leu Ile Arg Glu Lys Asn Glu
          100          105          110
Ser Asn Lys Ser Ser Phe Asp Lys Met Ile Glu Ala Ile Lys Glu Ser
          115          120          125
Lys Asn Gly Lys Lys Ile Gly Val Phe Ser Lys Asp Lys Phe Pro Gly
          130          135          140
Glu Phe Met Lys Ser Trp Asn Asp Cys Leu Asn Lys Glu Gly Phe Asp
          145          150          155          160
Lys Ile Asp Ile Ser Ala Val Val Ala Tyr Thr Ile Ala Val Lys Glu
          165          170          175
Asp Gly Glu Leu Asn Leu Met Lys Lys Ala Ala Ser Ile Thr Ser Glu
          180          185          190
Val Phe Asn Lys Phe Phe Lys Glu Arg Val Met Glu Ile Val Asp Ala
          195          200          205
Asp Glu Lys Val Arg His Ser Lys Leu Ala Glu Ser Val Glu Lys Ala
          210          215          220
Ile Glu Glu Lys Lys Tyr Leu Ala Gly Ala Asp Pro Ser Thr Val Glu
          225          230          235          240
Met Cys Tyr Pro Pro Ile Ile Gln Ser Gly Gly Asp Tyr Asn Leu Lys
          245          250          255
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<210> 16110
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 <212> PRT
 <213> Homo sapiens

<400> 16110

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			100					105					110		
Lys	Cys	Arg	Lys	Cys	Gly	Lys	Leu	Phe	Asn	Arg	Ile	Ser	Pro	Leu	Met
		115					120					125			
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Tyr	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Ala	Phe	Ser	Ser	Gly	Ser	Asp	Leu
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Ile	Arg	His	Gln	Arg	Ser	His	Ser	Ser	Glu	Lys	Pro	Tyr	Glu	Cys	Ser
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<211> 601

<212> DNA

<213> Homo sapiens

<400> 16111

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<210> 16112

<211> 831

<212> DNA

<213> Homo sapiens

<400> 16112

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<210> 16113

<211> 857

<212> DNA

<213> Homo sapiens

<400> 16113

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<210> 16114
<211> 647
<212> DNA
<213> Homo sapiens

<400> 16114
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<210> 16115
<211> 698
<212> DNA
<213> Homo sapiens

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<210> 16116
<211> 850
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<213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

<400> 16117

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<210> 16118
 <211> 794
 <212> DNA
 <213> Homo sapiens

<400> 16118

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 <212> DNA
 <213> Homo sapiens

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<210> 16120
 <211> 679
 <212> DNA
 <213> Homo sapiens

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<210> 16121

<211> 727

<212> DNA

<213> Homo sapiens

<400> 16121

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<210> 16122

<211> 863

<212> DNA

<213> Homo sapiens

<400> 16122

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tccttatgcc tttcattatt nat 863

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<210> 16123
<211> 658
<212> DNA
<213> Homo sapiens

<400> 16123
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<210> 16124
<211> 854
<212> DNA
<213> Homo sapiens

<400> 16124
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ggctttgtgc tctgccaaac ctttcttttag ccttcacac atcgcaactga agaatatgat 180
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tccatttgat ctgtttccaa tgtgtccatt tggatgtcag tgctattcac gagttgtaca 360
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actttatggt ctgatcctga acaacaacaa gctaacgaag attcacccaa aagcctttct 540
aaccacaaag aagttgcgaa ggctgtatct gtcccacaat caactaagtg aaataccact 600
taatcttccc aaatcattag cagaactcag aattcatgaa aataaagtta agaaaatata 660
aaaggacaca ttcaaaggaa tgaatgcttt acacgttttg gaaatgagtg caaacctct 720
tgataataat gggatagagc caggggcatt tgaanggtg acggtgttcc atatcagaat 780
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<210> 16125
<211> 845
<212> DNA
<213> Homo sapiens

09629469.072800

<400> 16125

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ccattattgt caaggctttg gctagaatgg cttgttcctg ctggggctga ccattagaac 180
tgagatggag gaacaaaagc tccccgatc ccgatcctaa cttccacccc agtccccctc 240
cactccccag gtcccataaa gtggcgggag catcgtagcg taggaagaag ccgccacacc 300
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gaaaa
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<210> 16126

<211> 767

<212> DNA

<213> Homo sapiens

<400> 16126

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gcagcaactg ccaatctgaa aaagtgtttg aaaatgtaat gcttatgggt agaagcctgg 180
taatgtgact caattttaa tcatctggat agggaaaattg gcagctttta tctaacctta 240
tagccaagat gatggaactc aggtgtgtca gggccctcta gctttcggca aaggaaaaaa 300
gtaggtcccg gtacaattca agcccacagg aaaaataccc aaaacaccat aacactttga 360
tctctgcaag gatgaaataa atgaatttgg acccttttct ctcaagtctgc cacattggtc 420
caaattatat tcaaaaacct ctgttacatt tgagtaaaga aattaatttt ttaaggggac 480
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tcatacaaaa agaaatgtga acaatctgaa aaacagcctg gcagttgcct gatgaaacac 600
gccgtacact ttactgccta cagaacctt ccagtcctcc tcccagcccg ccatcacagg 660
tcccttagtt ggcaaggagt tgtaagaaag ggggagggaa atnccaggaa cgtggaagtn 720
gatactctct accatgaana cactcgggga tcgctcctga gtctagg 767
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<210> 16127

<211> 231

<212> DNA

<213> Homo sapiens

<400> 16127

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atgcatgtgt gcctgtgtgt gtgtgcctgt gtgtgtgggt gcacatttgt gtgtgtgtgt 60
gtgcctgtgt gtgtgtgtgc acgtatgtat gtgtgcacac ttgtatgcat gtgtgcctgt 120
gtgtgtgggt gcacatttgt gtgtgtgtgc ctgtgtgtgt ggggtgcacat ttgtgtgtgt 180
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gggtgcacat ttgtntgtgt ntgccccgtgt gtgggtgcac attngtgtgt g 231

<210> 16128

<211> 817

<212> DNA

<213> Homo sapiens

<400> 16128

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gccctcaaa	tttgaaggc	aaaattctag	tgaagggtaa	gaagttgcct	tatcaccttg	180
gggatgatgc	agaggaagg	gaagtttccg	atgaggacag	tgcatgatga	attgaagacg	240
agtgcacatt	caagctccat	tatagtaatg	ggaccactga	gcacaggtg	gaatctttca	300
taaggaaaaa	actggagtca	ctgttataaa	aatctcaaat	togagataaa	gaagatcctg	360
atagtttcac	agtgcgggca	ctactgaagg	ccacgcacga	aggcttaaat	gcacacctga	420
agcagagtcc	agatgtaaag	gaaagtggaa	agaaatcaca	tggacgatcc	ctcatgacca	480
actttggaaa	acataagaaa	actacaaaat	cacggtctaa	atcttacagt	actgatgatg	540
aggaagacac	acagcagagt	actggcaagg	agggtggcca	gctgtacaga	ttgggtcgcc	600
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tggccgctca	ggacattgtg	gatgacggaa	ccacaggaaa	tgtgttatca	ttcagtga	720
caagagcaca	tcangttgtt	cagcaaaaat	cagagcagtt	catgatttat	aatcaaaagc	780
aacttacgan	gatttacc	tttggctacc	gcattga			817

<210> 16129

<211> 799

<212> DNA

<213> Homo sapiens

<400> 16129

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ttttattgac	atcttgtctt	gattcctctt	ctgtgtgacc	cactggattc	agagggtccc	180
atgagcacc	tcaggttcaa	tgattcatga	gtagaactca	gaggtaggga	aaactgttat	240
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agcatctaat	cctcccagaa	ataatgttta	acaacacgtg	gagtattgtc	agccaggaaa	420
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ggcacgaagc	cccaggtaca	agagacactc	atcaggcagg	atattccaag	gatttacagg	660
ggattcccca	ngagctggtc	aaggaccaga	tgttcctctg	aaaggtcagg	atttgagctc	720
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cttcattgga	tcanaatcc					799

<210> 16130

<211> 770
<212> DNA
<213> Homo sapiens

<400> 16130

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gcacaataaa acatttcacc cagttcccaa tctccgcaat ctggacctct cctacaataa 120
gottcagaca ttgcaatctg aacaatttaa aggccctcgg aaactcatca ttttgcaactt 180
gagatctaac tactaaaga ctgtgcccat aagagttttt caagactgtc ggaatcttga 240
ttttttggat ttgggttaca atcgtcttcg aagcttgtcc cgaaatgcat ttgctggcct 300
cttgaagtta aaggagctcc acctggagca caaccagttt tccaagatca actttgctca 360
ttttccacgt ctcttcaacc tccgctcaat ttacttacia tggaacagga ttgcctccat 420
tagccaaggt ttgacatgga cttggagttc cttacacaaac ttggatttat cagggaatga 480
catccaagga attgagccgg gcacatttaa atgcctcccc aatttaciaaa aattgaattt 540
ggattccaac aagctcacca atatctcaca ggaaactgtc aatgcgtgga tatcattaat 600
atccatcaca ttgtctggaa atatgtggga atgcagtcgg agcatttgcc tttattttat 660
tggtttaaga atttcaaagg aaataaggaa agcaccatga tatgtcgggg acctaaagcac 720
attcaggggtg naaanggtag tggatgcant gggaaacata taatatctgg 770
```

<210> 16131
<211> 560
<212> DNA
<213> Homo sapiens

<400> 16131

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cacggggcgg taaaggggag gctcgtcggg gagatggcgc cggatctcgc ttctcagagg 180
cattcagaga gottccccag cgtgaactct cggccgaatg taattttgcc aggccgcgag 240
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cccggaaggg gcggtggcgc aggttcctcg cgcgtccac gtgggggtccc gggcccagca 420
gtctgogcac cgggctcgt gctgcaccac gcgtcaccac cgcagaccat ggcagccgnc 480
gacggttcgc tcttcgacaa ccccaggacg ttctccagac gtnccccagc ccangcgagt 540
cggcaagcaa aggctacgaa 560
```

<210> 16132
<211> 700
<212> DNA
<213> Homo sapiens

<400> 16132

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cccaaaccac acataaatgg gttctaaatc tcaccctcct aacctgcagt gagtcccccc 180
gttccaccct cttgaggctg caaatctact gagaaggaat gggaaggatt ctacaaccca 240
```

009210"69452600

-10115/13211-

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acttttgata ctttttggcc atctctcagt ctctcccagc ccctaccccc acaccacctc 300
cctgctccca ggcagagacc gggttgcaact ttgttagggc cagcaggtca actgtaatgg 360
ccaagagtga gttaaggctg gaatgagaaa tatgccccaa gcttggaggg gtaagcagga 420
ataacacaaa gcaaggaaag agattctttt tgccctagtg aggaaaggaa gcttcagaat 480
gagggctgga ggatagcaac ttaggactgc agaagggggc agcttatgaa gatgggagaa 540
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```

<210> 16133
<211> 452
<212> DNA
<213> Homo sapiens

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<400> 16133
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ctggacagcc ccactatgg agaatgatga ggctgagaaa gctccccagg ccggggctct 180
cctgtgaggc aagtctcctg gcagtcctca ggtgtggcag gggttggggg gggcccgggg 240
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agctggaaag tgccctcgac ccagaaacct gggtcctgtg aagacatcca cctgtgtga 360
ggccagggaa tgctcatcan atnggggcag canggggtgt caccatgggt gggggttcct 420
nccaangcag gcagctgac tgccccacc tc 452
```

<210> 16134
<211> 429
<212> DNA
<213> Homo sapiens

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<400> 16134
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aggacagcat caacacctgg catgggagcc aggccttggc actggtggta gtggggangc 180
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cattgctngc ctgtgacatc tctgtggcan gggtgagacg tgatgctgac aggggcagta 300
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tttactgtgc ccttgatga gctactgac ccttctgggg tgttttttct tattattatt 420
acacntnaa 429
```

<210> 16135
<211> 668
<212> DNA
<213> Homo sapiens

<400> 16135

0962469-072800

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ccatttaaat gattgaattg aaaggaagaa gtaagacttg gaanatgaat attgaangaa 600
nggtgaagat gggaaaagat aaaggggttt attctgaaaa cantgactan aactctgagg 660
atagcagc                                     668

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<210> 16136
 <211> 481
 <212> DNA
 <213> Homo sapiens

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<400> 16136
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ctcacgagcc agctaggctc tgtttgtgat agaaaaatca agaccatgtt aatgatcgta 180
ataaaaagctt tctactgtcg ttgggggtggg ggggtggggct gggaaaaaac tggtttgagc 240
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aggcctccgc ccaattccac agtgaggggt ggtaggagc tatgggcccag gatggctcct 420
tggggaaggga atcgggatcc canncatanga agaactggca gcccggtcca ctgggcccac 480
a                                             481

```

<210> 16137
 <211> 568
 <212> DNA
 <213> Homo sapiens

```

<400> 16137
gaacaggaca gcttcatcga gccctatgcc accacctcac agctgaggcc tcgaccaaatt 60
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gacgaanagg acatttaaac tcagctgtca tccagcggca aggaattggg ggatgtcagt 180
gcccgggagg acagaggagg ccacagtgat gacctgtacg ctgtgccaca cagaaatcag 240
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tttccagggt cccctcctgc accacagcgg acacaacaaa aagatggtaa acaccctgtt 360
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acattgttac aagatctttg ggggtgtcgt tttctggctg gaaatgtctg tgggtgccagt 480
gtgcctttgc ctgantctt gtcctgcgtc cagaaagaat gagatataac tggtagnagc 540
ncgtcnaaga tatncagaaa taaccaga                                     568

```

<210> 16138
<211> 855
<212> DNA
<213> Homo sapiens

<400> 16138
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aagtctaattg ttaagaaaca catgcagacc cacaagggtg ggccctccang acacagtggg 180
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cagacgttcc caaagctcga cacatttctg gacacatca agagccacca ggangagctg 540
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naccgccact caaaaacttc ccttggtccc acacttgcca aaaaagggtg tttccttgtt 780
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tttcaaattt caaa 855

<210> 16139
<211> 594
<212> DNA
<213> Homo sapiens

<400> 16139
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cacgccctct ggcacaagg ggtatggccac tggcagtgat ggggatggag taagtgtat 180
gagactagga gaggaacacc ccaggaacac ctgaggtcac agagtgaatg aaggcaggta 240
aaggancaaa gggaatgggg gccccacat acgtgacccc agggcagcag cttggcctgc 300
accgagtcct ccatcacaca cactcccccg cccaccccc gcacccctggc tgtctaacca 360
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ctacgtgagg anccggggaa tggcttgctt ttttttttt ttttttttag angggctctc 540
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<210> 16140
<211> 550
<212> DNA
<213> Homo sapiens

<400> 16140

-10118/13211-

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cctcagtcag	cattctgccc	tttcatgggt	gtcagttgtc	tcgtccataa	aatgggatga	180
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tgcattgtcc	ggctccacct	ctggcctctc	ccanacatgc	ancgtgtang	gcaagggacc	420
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ggaaaggcct	ggaaagaaaa	tgaaaatctc	attcctcccc	tcaaanaaac	acagatnagc	540
cangaaanca						550

<210> 16141

<211> 759

<212> DNA

<213> Homo sapiens

<400> 16141

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canatggatt	tggaactaat	gctaacttct	gcttgggtga	gatgctaacc	aagtttagata	180
ctcttcagtg	aattctggta	ctgtgtacga	ttaatcctca	tccacagtat	tacgctgtgc	240
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aatgtagtct	ggctccaaga	aaacactaga	aactacttca	gctgggtgatg	gaaaatagtg	360
gaattctata	catcctttga	gacaatggaa	gcagcaaacc	agcgttcttt	ggattgggga	420
atatttttgg	tactaactga	aaaacatcat	tttaagcctg	ggccctgctt	aaanganact	480
tgttttctct	tccctctctc	cctctcttcc	ttttttccct	ccttctctct	tttctttcct	540
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ttccctccct	ccctcccttc	cttccctttt	tcctttctcc	cctccttccct	tccttttttt	660
tccttcttcc	ttcctccctc	cctcccttcc	ttttcctccn	ttcttctctt	ggccccccctn	720
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<210> 16142

<211> 676

<212> DNA

<213> Homo sapiens

<400> 16142

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cattctttgt	gagattcatt	tatgttgtgg	cacataacag	taattttctg	atttccagta	240
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gaataatgg	gctagaagca	ttcttcttta	cttctcttgg	ggcattcatg	tnggcattta	360
tctcaganca	gaatgaatgc	atacttcagc	attcttaatt	tcagttacta	tattttttga	420
ttctagaatt	tgcatttgg	tccttttttat	agtttccatt	cataagatgg	agttctacat	480
cttgtaaaca	catttctcaa	atatgttnat	caaacttatt	ttaaagcatt	tagctcacia	540

009240"69462960

ctcccatatt tggatctata tgtaggcct aattctatta totgtttatt tttcccctgg 600
tcttgtcctt ggtatgccg aaaantttt gantttaang aaagaaattg gggtttcnaa 660
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<210> 16143
<211> 719
<212> DNA
<213> Homo sapiens

<400> 16143
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aaaagtgtgc aaagtacacc tacaaggaga gtttccccat gttttccata atgtggccat 420
ccangatgag gaaggaacaa gaatacttga acatcacaga gaccaaacca tttccatacg 480
tcaaaaaccag anagcctggg atcaaagtta tacttggaaa aaggctgtaa gaaatgaaaa 540
accacctagc ancatctgtt cttcccttaa aatccaacct ccactggctt cctctgaatc 600
catcagggtc tttaatatat aaagaaaggc taaattcnca aagtntttta naaatgggca 660
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<210> 16144
<211> 498
<212> DNA
<213> Homo sapiens

<400> 16144
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gttgctgtca gcaaaatagc cagttggaga gctatgctgt tctccactaa aagaattgtn 420
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taaaaaatat gcnaaatc 498

<210> 16145
<211> 669
<212> DNA
<213> Homo sapiens

<400> 16145

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caaaatctgg ctggggagcc tggggtcatt gccttggaac tgctggatgt gaagtctcac 180
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attgaagggg tttgtttgac acttcanang cagccaatca tntccttctt gcctcacctt 480
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gctgatggat tacccttctt tcatctcagc ctttatctct caccacctct gcccttcanc 600
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<210> 16146
 <211> 533
 <212> DNA
 <213> Homo sapiens

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<400> 16146
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acttctaaaa tacatagtca ttcaggtnaa aagtttagaa tggaagaaca aagaaaacca 180
agaaagggga ttttcatttt tgttttcaca ttttaagaaa tattacttgc cttatatattt 240
tccaaacatc tgtaaggaaa acagtttata tcatcctata cttgacatcc cgcagatgag 300
accaaagcca cnttntgtcg tgataaagaa agatgctgaa accaatgaag caatctattg 360
tncaaaggag cttttcatta aggctcgtgt tattgtcatt cgttggctgg tttctttctg 420
gctgggagcc aaaaccacat acagggacct catattcctg gggatgggaan gtgaagtctt 480
gcccaanaat attcnnaaaa gccgctgcta gtttagtata caganaagaa agc 533
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<210> 16147
 <211> 662
 <212> DNA
 <213> Homo sapiens

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atcaggcgtt cacaaactgc attctttaat aggttttagt atcaaaaaatc gtgtctcttg 180
ccatgatagt gatgatgata ttatgagaaa tgatcgtgag tatgactcag gagatacaga 240
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tcaactgtatt aaactacaaa aaagaaaaag caatgtagag tcagccctca gtcntggatt 420
aaagtctctt aatcgtanat ctccctctca ctccggtngc agtgaagatg ctgattctgc 480
atcagaatta gctnactctg aaggagggtga ggagtattat gccctgatgg aaaactgcct 540
tcgtgtgaat ctcacttttag ctgattttgga acaattggct ggcagtgatc tgaaggttcc 600
naatgaagat cttnngaata tggaccacga aacccccccc ntgcagtttg acngaagctc 660
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CC

662

<210> 16148
<211> 736
<212> DNA
<213> Homo sapiens

<400> 16148
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aacttttggg aaagaagttt aagacctttc tcccaccatt tcagcaggat aaattccaac 120
tggattanaa aatgaaatgt taataatgca aataagtaca tatttatatc tgtatataaa 180
atacagttga tatttgcctg gtgttttagg gtctaaagga ctttctaagc ataaaggcaa 240
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gaactccang ccgtctcaaa aacctccatg tttcatttct tttcaaaact cccaaaaaaa 660
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aaaaattgtg tttcna 736

<210> 16149
<211> 606
<212> DNA
<213> Homo sapiens

<400> 16149
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tcattcccag gggaataagg aacatcataa agacaacaat tacgtatcaa tgttggttcct 180
tgggataatt tttcggagag tagaaaatgc agaaagtgtc aacatagact tgacatatga 240
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gacttcaatc caaaagattg tctctggata gcagttgtct ggatagctcc agaaacctga 480
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<210> 16150
<211> 755
<212> DNA
<213> Homo sapiens

009220.6462960

<400> 16150

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caccaccacc accatcacca ctctctctctc tgaatgcag cagccacaga tctctgtcta 180
cagtgggttca naccgacatg ctgtacaggc attgcatcgg cccccagct cagctgctca 240
gtaccttcag caaatgtatg cagcccaaca acagcacttg atgctgcata ctgcagctct 300
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ccaaacgtct atcaacctct ccacttctcc tacacctgca cagttaataa gccgttccca 480
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gatacnataa gaagtttttt ttaatatattt aaaaaaatgt ttttaattgtt gntttttttg 720
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<210> 16151

<211> 842

<212> DNA

<213> Homo sapiens

<400> 16151

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tgccacaaag tgtacattca agagtaaatt gtttaaagcc aaagggcctt gcgccacgtc 420
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atttcgcttt tcacttatta ctcatcaaac tgactccggt tcacagtgga aaagagaaga 660
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gg 842
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<210> 16152

<211> 906

<212> DNA

<213> Homo sapiens

<400> 16152

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ggaaaggga cctacaatgt tagctatgcc tggaagatgg tacaagacac ttcctttatt 180
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ctgggcacac	tgnggctgtg	atggcattga	cttcacactc	agatacttnt	acaaagtctt	840
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<210> 16153

<211> 667

<212> DNA

<213> Homo sapiens

<400> 16153

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agntcctcag	agntgtccag	cagccacggc	cgggggtttt	caaggcttaa	togaagagat	540
ggagctggtg	gctggacccc	acttggtgtc	aataaatacc	aatggntgca	aattgacctt	600
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<210> 16154

<211> 836

<212> DNA

<213> Homo sapiens

<400> 16154

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catccctttt	ccggaagtc	cttttacttg	gatctgcctg	ctggcaagaa	tctccagttt	360
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cacaaaatgc acactctgcg atatgtagta ttggcattat ttccttcttc tacatcaggt 780
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<210> 16155
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 <212> DNA
 <213> Homo sapiens

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<400> 16155
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cccgcgagtc tgcgaagcca gccctttcat aggacctgcg ctgccaagaa aaacacccaa 780
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<210> 16156
 <211> 847
 <212> DNA
 <213> Homo sapiens

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009220.69462960

-10125/13211-

tatattnttt ctttttttat atgaaggctc aagtaaagac tttgaaacac tctcagggat 660
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cagttttttt ttaataactga atgcagatgc ttcanaactc ccagaatctt ttgacttgct 780
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<210> 16157

<211> 724

<212> DNA

<213> Homo sapiens

<400> 16157

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gcaagacgcc atcatcagca aaccacattg tcctgcgggc cggacctgcc cgacggcggn 660
cgcacccac gggccaagcg gggctggaca ttcggaacaa ggaccaangg tccgcaancc 720
cgaa 724

<210> 16158

<211> 522

<212> DNA

<213> Homo sapiens

<400> 16158

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<210> 16159

<211> 632

<212> DNA

09629459.02800

<213> Homo sapiens

<400> 16159

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cagctccgtt gcggaagtgt agcgggggga ggccggcgcc accgcggcac taagcacgag 240
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<210> 16160

<211> 707

<212> DNA

<213> Homo sapiens

<400> 16160

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<210> 16161

<211> 779

<212> DNA

<213> Homo sapiens

<400> 16161

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ggggagagtc ttggagatgc tgtgaggga agacaccggg aaaagctgca ggcattttcc 180
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000220"69462960

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cctctccact ctatgcctaa ggcagaactc atgacattca gagcaactgc tcaaccatca 720
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<210> 16162

<211> 726

<212> DNA

<213> Homo sapiens

<400> 16162

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ccatcctgat gctgcccagc cagggtggcct tgtctgagcg agaagctctg ggatggacgc 180
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ccagggtgcc cacttgcaag caactgggag gctgggctcc cctgagaaac caccaagaag 480
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aagcaattgt ccaaagnagt tgggggaagg acccccgggc nanccanggg ggaaaaaggc 660
ccttctgttg cccaatcca atgttaaaag nccctccctg gccccttggc ccttgggggtt 720
gttnaa 726

<210> 16163

<211> 785

<212> DNA

<213> Homo sapiens

<400> 16163

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tgtcgtcaa tcagatgctt acatccaagg aaatcaaacg tcaggaggcg atctttgagc 180
tttcccaagg agaagaagac ttgatagaag acttgaaatt agcaaaaaag gcctatcatg 240
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aagatcaccg agtccaggat ttctacagc gatgtttaga atccccctt agccgcaaac 540
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gctattaaat atcattcang gaattgtggg aaaaatcaac accaagactg gngaactctga 720

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gatng 785

<210> 16164
<211> 727
<212> DNA
<213> Homo sapiens

<400> 16164
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agtatcc 727

<210> 16165
<211> 547
<212> DNA
<213> Homo sapiens

<400> 16165
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cagcctcaac ctctaagct caaccaatcc tccagcctca gcctcctgag tagctgggac 120
cacaggcatg caccaccaca cctggctaatt tttcgtatct tttggtaaga gatgaggtct 180
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<210> 16166
<211> 557
<212> DNA
<213> Homo sapiens

09629469.072800

<400> 16166

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gaattgtgtt cattgagtac ttttatttag caaagcaaaa acttgctgat actaataaac 180
tctgcaatga aatcatgttg actgcatcag tctgtaccat gacctgacct cattagcaag 240
tttattcaga acaatgttaa gacgtttccc aaaagttaaa ctacatgtaa ctacaaattg 300
actctaaaaa ttaaaactgg acttacaagc attctagaag attcaaaact gaagtaaadc 360
ttcaaaacta gatgtacaaa gagaaaaaaa ttgaagcgcg tgaacagaga aacctcatta 420
acaagggcaa cgacaatcct atgggacctg gcaactgagga acctcactga ggattacatt 480
tacatagatt gctatacttc tcaatgnaca caaatgtacc gaatgaatga tacgtngaaa 540
agaataatca tggngngg                                     557

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<210> 16167

<211> 548

<212> DNA

<213> Homo sapiens

<400> 16167

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ttacagggtg ccgccactac acccagctaa tttttgtatt tttaatagag acgggggtatc 180
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attattattt ttttttttt gagacggagt ctgctctgt cgcccaggct ggaatgcagt 360
ggcgcgatct cggctcactg caaactctgc ctcccgggt catgccattc ttctgcctca 420
gcctcccag tagctgggac tacagggtgcc caccaccaca ccngntaaa tttttggatt 480
tttaaganaa accgggggtc actggggtaa ccnngaangg cttaatctct ngaccttgga 540
accgcaa                                     548

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<210> 16168

<211> 483

<212> DNA

<213> Homo sapiens

<400> 16168

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cctcagcctc ccaaataagg tggaccgtaa gtgcgtgcca ccacgccaga ctaatttttt 180
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ccgtatcacc agcatntaan gacaatngg cagcatcatn tгнаacgctt aaaaaaaaaa 480
ang                                     483

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-10130/13211-

<210> 16169
<211> 581
<212> DNA
<213> Homo sapiens

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gtaactatcc gatctaccag gtcatttcct aggcaaaaat tcatgggagc tccaaatcaa 240
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tttattgcat cttttctaca ggtgagaaaa ctaagattca gaaagttaat taattttctt 420
gaggttatat agctagaaag cagggaacca gaaatcaatt tctgttctgg ttgtcccca 480
agcctgtgga agtctaaaaa cctgcctnta actacaggct tactccttg gaaaataatc 540
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<210> 16170
<211> 593
<212> DNA
<213> Homo sapiens

<400> 16170
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tatacacata taagtataca tgtagacatg ccatatatac agatgatgct atactatatg 180
gtatactagg gcacaccaat ttgactataa atgcaaaaagg ccccaacaat aacttgaaa 240
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tcaaacagtt tttgacttcg gagcatttca gatttgggtat tggaatctgg ggtttacaga 480
tgttcaacct gtagataaaa tacttatatt ccatggatga agacaaattc acccagatac 540
cntaatatat tataatctgga agnccgttaa cgtaatagac tntcatagaa ngc 593

<210> 16171
<211> 546
<212> DNA
<213> Homo sapiens

<400> 16171
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gcatgagcca ccgcaccggg tcagtgtttc catTTTTTg ccactgcagt tgcttgtctt 180
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gaaggagaat gtgggccttg cctccctgca ccagtcatat gcatggcccc agtggcttgg 300
ctcagagtct ggcactgcag gccgactgcc tccaggcaca gctgcaggaa gtgttccagg 360

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ctgaggacac ccacctgcgc ctgctcttgt ggatccagcc acccgtggct ccttgagccc 480
ancntangt cttggggggcc tggggggacta gnggtnggan tcactttagg gtggaaaatg 540
gccggc 546

<210> 16172
<211> 573
<212> DNA
<213> Homo sapiens

<400> 16172
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caactggggc tgccgtgtga gaaagacagg gacccaagaa ccaatggggc cagataatgg 180
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gccgtgtaac aacttgctgg ggctatggca gaancnctgg gaagcaccct gggcaacctn 540
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<210> 16173
<211> 571
<212> DNA
<213> Homo sapiens

<400> 16173
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atacaggcat gcaccacgat gcctggctaa tttttgtatt ttttttagtag agacagggtt 180
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gtggtaatag agatacacia aaatatcact attagatact cctaatacaa taattatgat 480
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ataatgnact tggctgggtgc tcctaatingg g 571

<210> 16174
<211> 561
<212> DNA
<213> Homo sapiens

<400> 16174

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ttctgggcct	gcataaggga	gagtcgccatc	aaacgttccc	ttttcagtgt	tgtctctctt	180
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ctncgagctt	gttgccatga	agcaagttcc	tttgggagca	actcgacctt	tgtttctggc	480
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<210> 16175

<211> 618

<212> DNA

<213> Homo sapiens

<400> 16175

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ctacaggcgc	cagccaccac	acccggctaa	ttttttgtat	ttttagtaga	gacgggggtt	180
tcaccatgtt	agccaggatg	gtctcgatct	cctgacctcg	tgatccgtcc	gcctcggcct	240
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angttgccac	tgggggtttg	ganggaaccc	actgatcaga	ggccacgccc	ttttaagttt	540
tgaaccngat	gagaagaagc	cttgatcaaa	tggggcctga	ggcncccant	tgttgcattg	600
ggaacatggg	ttggnccn					618

<210> 16176

<211> 555

<212> DNA

<213> Homo sapiens

<400> 16176

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tgggactaaa	ggtgtgcacc	accattcctg	gataattgtt	tttgtgtttt	ttatagagac	180
agcatcttgc	tatgtcgccc	aggctggtct	caaactactg	aaotcaagcg	atctgcccac	240
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<210> 16177
<211> 527
<212> DNA
<213> Homo sapiens

<400> 16177
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gaagatctca tgcttatttc aactttttta ggagacttta ttttaattnaa tttttttttt 480
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<210> 16178
<211> 574
<212> DNA
<213> Homo sapiens

<400> 16178
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agattttatg aaacactaca cgtttttaca gagattttta aatcaggtaa taattaaaaa 420
aaaaaaagca tatgctatag ccccaacca gctcttatga gtagcattta tcaaggtttg 480
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<210> 16179
<211> 558
<212> DNA
<213> Homo sapiens

<400> 16179
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acaatgaagc tgagganaag gtcanggggtg ggagcgcgtt tctactggng cccgttcaag 540
gccatntgac agcctgan 558

<210> 16180
<211> 507
<212> DNA
<213> Homo sapiens

<400> 16180
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gacaatcaaa cgtgtntaag aaaattcagc caatgagagt gcgaaagtgc cntcttgngt 420
tgccaatga gaacagcgac ccgttcgcca ngggccgcca atggggccca agccaccncg 480
gtntttgaat tctngaacaa ggnttca 507

<210> 16181
<211> 549
<212> DNA
<213> Homo sapiens

<400> 16181
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gaccgtgggtg tccacggcgt gaacagacca cgtctgggtg gottcagact ccctatcaac 420
gataccgtct gatggacaca ggtgccgtct gtggattgcc accgggggga catgggcagg 480
gacctttttt tanccttggg aacttggncn aaccatttta aaatcgggag gnottggtttc 540
tggttacaa 549

<210> 16182
<211> 545
<212> DNA
<213> Homo sapiens

<400> 16182
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gccct 545

<210> 16183

<211> 457

<212> DNA

<213> Homo sapiens

<400> 16183

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<210> 16184

<211> 556

<212> DNA

<213> Homo sapiens

<400> 16184

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aattgtactg agttagagat tatttcaaat tcagtgtttt gtcagaaaac attttcatta 180
gcattttagg ttaggactat ggaaaaattg gagtatatgc tatcaaagag caattatatt 240
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aacattacca agaaaagaac aatttacatn cagcattact tattgccagg ttggaaattg 480
gggactattt tggctgctcc taccatggan ctggnagggg acctttttaa taaataatcn 540
gaaancgggt ccaaat 556

<210> 16185

<211> 548

<212> DNA

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<213> Homo sapiens

<400> 16185

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aagaactgca cagacagAAC agtatgcttc aagcggaaaa aaatacggag aagggtggagg 180
aaagcagcac aggtgattta ggtgcatctt ctgaaaaaga aatgcacgcg cggacagcc 240
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tggtacttct tatcaactcg tcaacataat ggatgggnatt aaaaagccag ggtncctttc 480
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aaaattcn 548

<210> 16186

<211> 438

<212> DNA

<213> Homo sapiens

<400> 16186

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agttcgcgtt attcagcacc agagtaaattg cttgggcata aggnctgtct ttaaccana 180
caggtcttgn cttatatgta cagcatagtc ttaagtatgt atgctotact tatggctttg 240
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ganccagnga caccgttt 438

<210> 16187

<211> 270

<212> DNA

<213> Homo sapiens

<400> 16187

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aacatgggaa atgggnacag ncttcacaa 270

<210> 16188

<211> 519

<212> DNA

<213> Homo sapiens

09629469.072800

<400> 16188

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agacaagata agggtaatca cccagcactc gggatccatg tagattaagt aaatttactt 180
aggttccaga ggaatgtctt caggactcag accttagtta tagattagaa gaagttaatc 240
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taccCGgtta caaaaataac tctcttcttt ccagttcat ctgcctctcc atattgggct 420
gcaanaataa gcagcagacc tcagtttggt ctgggaacaa tgtctcctcc aacctcaatg 480
gcnggntgtt gtngcaaaaa cccattctc tancctcca 519

<210> 16189

<211> 292

<212> DNA

<213> Homo sapiens

<400> 16189

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cgtgaaaata accaacattc ttaattaaac ttccagttct gtgaatctaa tactagatca 240
caccttgggt anttcnaaa aanttango ctgaataaaa nttaaaaacc at 292

<210> 16190

<211> 289

<212> DNA

<213> Homo sapiens

<400> 16190

aanagatcaa aatgcattta atgtggTcta gtctcatcgc ctacgtcttt agatactgct 60
atgtattgaa aataacatga aaactctcca gtttcaccat ttaaaataat ttgacattct 120
atgccctcac gcagggcaga cccccgtac aggggcctcc caacggtggc tcctccccgc 180
ccccaggac cctctgggtg gggaccacgc ancacagcac cagcagangc tcagggggtg 240
gccaccgtgc tctgancaac aagcatango tgcacacana cacacactc 289

<210> 16191

<211> 313

<212> DNA

<213> Homo sapiens

<400> 16191

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tcaggccaga ggaggctaca ccacgggctc ccgcagattc tagcagggtg gggcatgaga 180

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cttcaggtca taggagcaga catcgcagcc gtccaacaag tctggcctga gagacgccat 240
tgaanggttg ggggcaacca naanctcttg ggttgctctg cacgcctgtc ctcgtgagtg 300
tgtcctggaa aaa 313

<210> 16192
<211> 559
<212> DNA
<213> Homo sapiens

<400> 16192
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tgtacanatn angaacacgg ggctcaaana antgaantga cttgccaag gtcacacagc 180
aagtgcattg caactcttgg atttgaagcc agatctgtct catagctgca gtctagccgt 240
gacacctgag tgcctcctaa aagctacatc acanagctgt ctgaggatgc tgtggggaac 300
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nggcttccgg cagaaaagg 559

<210> 16193
<211> 575
<212> DNA
<213> Homo sapiens

<400> 16193
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tcactatgt cattacagg actgaaaaca gccaccatg gcctcatctg tgttccggcc 180
antggcaagg ganggaagg gaangtaanc actctggta ctatgttgta taataagtta 240
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nccccatcng aaaatccttg gggttatttg acttaaatgg taactggtnn cccgcctgga 540
attttttaaa aaaanccnaa taaaaaaggc ttinc 575

<210> 16194
<211> 585
<212> DNA
<213> Homo sapiens

<400> 16194
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09629469.072300


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<211> 509

<212> DNA

<213> Homo sapiens

<400> 16195

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caactgggtc ctctgttttag ggtctcaciaa ggtagaaatc aagatgttgg tcagaagctg 120
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<210> 16196

<211> 573

<212> DNA

<213> Homo sapiens

<400> 16196

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aaaaagaatt gagctatgac ggcattaaca gatatggagg gaccttaa at gctattact 180
aagtgaaaga agccaatctg aaaaggctac atactatata cttttaacta tgacattctg 240
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<210> 16197

<211> 585

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<212> DNA

<213> Homo sapiens

<400> 16197

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actggtcatg aagcctactc gggattatgg atataaactt gtggaatcag ttccaagag 240
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ccttggtatc aactcacaga acaagaaaat acagcatccc tctatattct agacatctac 360
ctgctttcag gtgtgacttc tgaacttgcc agaaggaaaag aagtgtggag ctgccccctt 420
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aacggtgaag attgcaggga agtangtgat ggttgctata aaaagctttg ggtctttagg 540
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<211> 554

<212> DNA

<213> Homo sapiens

<400> 16198

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<210> 16199

<211> 568

<212> DNA

<213> Homo sapiens

<400> 16199

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<210> 16200
<211> 585
<212> DNA
<213> Homo sapiens

<400> 16200
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ggactacagg cacatgacac cacatccaac tagtttttgt attttttgta gagacagggt 180
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<210> 16201
<211> 572
<212> DNA
<213> Homo sapiens

<400> 16201
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<210> 16202
<211> 589
<212> DNA
<213> Homo sapiens

<400> 16202
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 aaatgttgga gtgctacatt ttgntttcca tgattcaaat tcatgcagaa atgcttagat 420
 tctaaaaact agtttaactc gagctctttg gtcccttactt cttncccatg ctggatgatt 480
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<210> 16203

<211> 547

<212> DNA

<213> Homo sapiens

<400> 16203

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 atactagcat tccctggctgt gtaactctata cattttcatt ttaaataatag taattcaagc 420
 ataatccata tttaaaaaat tagactaagg agagacaata aagggtttta accgttctct 480
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<210> 16204

<211> 589

<212> DNA

<213> Homo sapiens

<400> 16204

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 ggcttggtac aattcccaca gcacccaggg ccaatgggtt acttttctga aaagggaatt 540
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<210> 16205

<211> 572

09629469-072800

<212> DNA

<213> Homo sapiens

<400> 16205

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aaattgaaac agtaagtatt taaaaggaaa gaagaataga atattgccta tatgtatacc 480
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<210> 16206

<211> 552

<212> DNA

<213> Homo sapiens

<400> 16206

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gccccatgtt atagtagcca gatttgatta atccctgtat aaatcacaaa gcaatttggt 360
ggataatgtc ttggctaact ggcagcagct tttaccgtg atattaaaaa aaaaattctt 420
taattaagaa ccagactttc acaattttaga aaacttcttc cttatatgn caatattctc 480
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<210> 16207

<211> 532

<212> DNA

<213> Homo sapiens

<400> 16207

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caccagaagg gctcttaaaa tccagatata gaccatttaa aatcccgatc tctggagggtg 180
gagccaggta aaggtatctt ttgaatctcc tctggtgact ccaagataaa gccaaagtta 240
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atacacattc taactgtata catcaatcag aacatttctt cttgctatct ttgnaattct 420
gctaaatgga aaacagtttc atggccagga aacctttgca gaagaaaatt aaaaaggaaa 480

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cntttgcttg accgagctaa tnccaaaagc ttccacttaa tngngctggn cc 532

<210> 16208
<211> 556
<212> DNA
<213> Homo sapiens

<400> 16208
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cagcctcctg agtagctggg attacaggca cgcaccacca ggctcggcta atgcttctat 180
ttttagtaga gacgggggtt caccacgttg gtcaggctgg tctcgaactc ttgaccttgt 240
gatccacccg ccttggcctc ccaaagtgtc gggattacag gtgtgagcca cctcgcctgg 300
ccagtgttca tgaatattaa gatcatttct gcatttgtaa aacggatcat catactagct 360
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cgaggccaca agcctgnact tntgcgtcct naccgnttt cccctttccc acattcttcc 480
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attggnccct gatctt 556

<210> 16209
<211> 570
<212> DNA
<213> Homo sapiens

<400> 16209
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tgaaaaataa atacagctag ttaagtataa aatgccaaat aaaagtgaca cgtacaatgc 180
ggtttataaa aataagctta acatctgaga aaatgtacca agtggttgtg tgtcctcaga 240
tgtgtgggga ggatccatcc cccaccact gcagcctcac accgagtcca ccttggacat 300
ggnggccaca ttactcagct gggagaagcc acccttatcc tggttcctgc ctctggggg 360
ctntggagac ggatgcctat ggcgcctcat ctttaaactg tccttagtag cccaggggag 420
ccacaccctn actccctgnc tnccccgggt ccgcatgggt gcaccogtga ggcaatctca 480
gcaagtcctc atgctggtct ttggctttca caagaaaagt gaactttcag ctttaataacc 540
agaaaanggct taaaaagnaa aacaggnctt 570

<210> 16210
<211> 143
<212> DNA
<213> Homo sapiens

<400> 16210
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ggttagggag ctagaggtag atgggtgtgg ggggtgggggg gnaaacaaac tgacnaangg 120
aacaaacnag angagagatc cnn 143

09629459-07300

<210> 16211
<211> 597
<212> DNA
<213> Homo sapiens

<400> 16211
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ggcattgttg ggagcgtgtg ttctgtgatc ttcagacccc aggttctttg gtacgctcgt 120
gtttagtgtg tatttattaa ttggggaggg tatttgaggc aaaccgaaag tctcggggcg 180
gggaantgag tggagcctgg gcataattga ggagtcgocg gagttgaggg atccacgttg 240
aaggtgacaa tgacttttct ccgccgcagt gttctctcgc ggaaaggagc ccggcggccg 300
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gcgtgggccc gaggcgcggg cagggtcggg cgccgttgtg aaacctcgtg gtttagttga 420
ctgcagccct cggactaagg tggacaataa acgccattcg ctcggaact aattgccatc 480
cgcttcgaa ctggcggccg aaggtcttta aatcggcctt tgggggtcag tgctgggctc 540
tgccngaacg caccgcggtt ggcttgtttg ctccactccc gaaggantcc gntncca 597

<210> 16212
<211> 102
<212> DNA
<213> Homo sapiens

<400> 16212
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cagtgggtca caggcatatg gtgggggggt ggngtgnnnn nn 102

<210> 16213
<211> 582
<212> DNA
<213> Homo sapiens

<400> 16213
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ctgtcctccc aatcccctgg gccattttca tgacagcttg nttccatgta ttaaaggaat 180
gacatataca gaaatgtcgt ctcttgagcc cagtcgggtc ttagatatcc gccatcctct 240
gtccttcagc acaccccggg cagcgcctgc caggtcctga gctgccagtg tgtacctgtg 300
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tgataaaacg tcccagagtc catcagtggc caagatcagc acatcatctg atccatgatc 420
atattttgaa agatcgtaga ttcttacctt tggagctgaa nacaggaatg gtttaattga 480
aatgttggag tcatgcncct ttangncatg ggccccaagt cccctgggac ntcaaaaggt 540
gccattaccc cgggcctttt tgccttttnc annaataagg gg 582

<210> 16214
 <211> 469
 <212> DNA
 <213> Homo sapiens

<400> 16214
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 cctggctcat ctcatcttct agaattggata tattgacaaa gaaaagagaa gaaataagaa 180
 atgcaaaaaa tgcaccttca ccatatggcc ctttagctaa aagctacaaa gctaacaagg 240
 gtgtgccatc agaactatcc atgtacatgt acagagatga ttttaacagc tgccatgtga 300
 catgtggctt aaagtcaccc tgagtctact aaatggttgt gttgtcaata tatctaaata 360
 tggctacgtg ctctccagag tgttcccatg atcaccacgt cctttgatca gtgccatctg 420
 gaagaacana tgagtgaan cctnctntna tctctntgng ctggcttcc 469

<210> 16215
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 16215
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 agaccagtct ttaaggagtg aaattttttc ttctgcttgc tctagtctat tgataaagct 180
 attaatcttg ctttaaaatt tcttatgcaa gtttttcaat tccanaagct ctggttggtt 240
 tctttttaag gtgtttattg cttccttaat ttccctggatt catttagaag tttctttgtg 300
 tanattttca atcaggctctc gggctctcatt gancctcttt gcaaccatgt tttgaatttt 360
 taatttgtca ttncnaattt cctatttttg gttanggacc atggcttggg aaaccaatgt 420
 taancctttg gtctggtaac taatatncaat aatattccat agtggccaaa attttaatgc 480
 tgaattcctc ctcanccnga aaaacngggc attcc 515

<210> 16216
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 16216
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 catcagcggc caacaatac ctggcctctg gctgcctctc ttgcaagctg ggggtgggct 180
 gtctctcctc agcagggcca cgggcttctg aaaaagtgtg tgtcctggaa cacaggaaca 240
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 ggaaccaana ccaccca 318

<210> 16217

008220"69462960

<211> 516
<212> DNA
<213> Homo sapiens

<400> 16217

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tcttttccca acacactggc tgatggcttc taaaagtggc tgatggcgcc tacaaanaat 180
cattcattct tttcttcacc aataaaggct gttcttggct ttctctgtct tctgtctgca 240
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aaaaaaaaatt cntcntgttt aagacctata aatacagaaa tatgttttac agggtnaaat 360
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atatcttgtc cacagcttga atgcncatga natatgttca taataaaatg acatcnatgc 480
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<210> 16218
<211> 508
<212> DNA
<213> Homo sapiens

<400> 16218

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tgccanaacg gacatataag acaaactcca ngaaaggnta tangcaaata aatganggtt 180
ggggaaacac tgctttaaat caagactatt cactcatgga ccatcccaac cttataaaa 240
ataactagca ggtgaaaact ggtagtgtan gtctgtctcc naagtatgca ctgggaacag 300
tggaagggtt atagataatc cactaaaaga agagctccac atacaaatac atacattatt 360
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acttacgtna ctcttgaaaa aaaggacatg gtgtncanca tctcccaaat gttggcaanc 480
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<210> 16219
<211> 2311
<212> DNA
<213> Homo sapiens

<400> 16219

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gagcagctgt catcttgtga aagcagagtg tcttgttgcc tattgattgg gttgttcagt 180
caattgcaaa aaaagtggat ctaactgtca atggtagtta tatgataatc ctggagataa 240
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caggtaagtc tacaggtatc ttttgttaga taaaccagaa attaagcatt ccctttgtaa 420
actccaaaca agattttgaa acaccatggc cccccccttat ccacctccaa gatctccagt 480
ggatgtctga aaccactgat agtactgaag tctctatata ttatgttttt cccctgtatg 540
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<210> 16220
 <211> 2043
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
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tgtttcttca agcaattcca gcagttttatc aaaagctgag catccaactg caaatgaata 420
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gaagttgtgg gcaaaaggaa aacaaaatta aaactgtatc atttgaatct aaaatacaac 720
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ccc 2043

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<210> 16221
 <211> 368
 <212> PRT
 <213> Homo sapiens

<400> 16221
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 35 40 45
 Gly Thr Leu Phe Arg Leu Leu Ile Glu Pro Val Ile Phe Cys Leu Asp
 50 55 60
 Phe Ile Lys Ile Gln Leu Asp Glu Pro Asp His Asp Pro Val Glu Ile
 65 70 75 80
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Ser	Ile	Ile	Asn	Glu	Ile	Gly	Ile	Lys	Asn	Asn	Ile	Ser	Asn	Phe	Phe
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			245						250					255	
Pro	Ala	Lys	Gly	Gly	Ile	Ser	Val	Thr	Asn	Glu	Asp	Leu	His	Cys	Leu
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Val	Lys	Thr	Trp	Thr	Arg	His	Val	Asp	Ile	Phe	Glu	Lys	Asp	Phe	Ile
			340					345					350		
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<211> 3409

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (898).. (1419)

<400> 16222

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<211> 174

<212> PRT

<213> Homo sapiens

<400> 16223

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Pro Leu Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr
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Arg Leu Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His
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Ser Pro Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr
85 90 95
Arg Leu Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln
100 105 110
Arg Gln Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu
115 120 125
Glu Lys Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val
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<210> 16224

<211> 1880

<212> DNA

<213> Homo sapiens

<400> 16224

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<210> 16225

<211> 1454

<212> DNA

<213> Homo sapiens

<400> 16225

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<210> 16226
 <211> 2498
 <212> DNA
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 <221> CDS
 <222> (448).. (1005)

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<210> 16227

<211> 186

<212> PRT

<213> Homo sapiens

<400> 16227

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Asp Leu Leu His Asn Pro Pro Gly Ser Ser Asp Gln Glu Gly Asp Asp
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Pro Met Glu Glu Asp Asp Phe Met Phe Glu Leu Ser Asp Lys Pro Leu
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Leu Pro Cys Tyr Asn Leu Gln Val Ser Val Ser Arg Gly Pro Cys Asn
          85             90             95
Trp Phe Leu Phe Ser Asp Val Leu Lys Arg Leu Lys Leu Ser Ser Arg
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Ile Phe Gln Ala Arg Phe Pro His Phe Glu Ile Thr Thr Met Pro Lys
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 <212> DNA
 <213> Homo sapiens

<400> 16228

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<210> 16229
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000220"69462960

<212> DNA

<213> Homo sapiens

<400> 16229

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<210> 16230

<211> 1533

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (866).. (1339)

<400> 16230

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<210> 16231
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 16231

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			20					25					30		
Gln	Pro	Leu	Trp	Lys	Thr	Val	Trp	Gln	Phe	Leu	Lys	Asp	Leu	Glu	Leu
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Glu	Ile	Pro	Phe	Asp	Pro	Leu	Ile	Pro	Leu	Leu	Gly	Ile	Tyr	Pro	Lys
	50					55					60				
Asp	Tyr	Lys	Ser	Cys	Cys	Tyr	Lys	Asp	Thr	Cys	Thr	His	Arg	Leu	Ile
	65				70					75				80	
Ala	Ala	Leu	Phe	Thr	Ile	Ala	Lys	Thr	Trp	Asn	Gln	Pro	Lys	Cys	Pro
				85					90					95	
Ser	Met	Ile	Asp	Trp	Ile	Lys	Lys	Met	Trp	His	Ile	Tyr	Thr	Met	Asp
			100					105					110		
Tyr	Tyr	Ala	Ala	Ile	Thr	Lys	Asp	Glu	Phe	Met	Ser	Phe	Val	Gly	Thr
		115					120					125			
Trp	Met	Lys	Leu	Glu	Thr	Ile	Ile	Leu	Ser	Lys	Leu	Ser	Gln	Glu	Gln
	130					135					140				
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09629469-073800

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<211> 1179
<212> DNA
<213> Homo sapiens

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<210> 16233
<211> 1923
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1061).. (1660)

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tttgagaaa catctattca agtttctagt tcatttttaa attggattat ttgctttttg 420
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<210> 16234
 <211> 200
 <212> PRT
 <213> Homo sapiens

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<400> 16234
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Thr Thr Met Arg Tyr His Pro Thr Pro Val Arg Met Ala Ile Ile Lys
             35             40             45
Lys Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Leu Gly Thr
             50             55             60
Leu Leu His Cys Trp Trp Asp Cys Lys Leu Val Gln Pro Leu Trp Lys
             65             70             75             80
Ser Val Trp Arg Phe Leu Arg Asp Leu Glu Leu Glu Ile Pro Phe Asp
             85             90             95
Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys Ser Cys
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Cys Tyr Lys Asp Thr Cys Thr Cys Met Phe Ile Val Ala Leu Phe Thr

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09629469.072800

-10161/13211-

115	120	125
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145	150	155
Thr Lys Asp Glu Phe Met Ser Phe Val Gly Thr Trp Met Lys Leu Glu		
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<210> 16235
<211> 1672
<212> DNA
<213> Homo sapiens

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<210> 16236
<211> 2460
<212> DNA
<213> Homo sapiens

<220>
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<222> (1668).. (2174)

<400> 16236

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-10163/13211-

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<211> 169
<212> PRT
<213> Homo sapiens

<400> 16237
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35 40 45
Pro Val Leu Gln Met Arg Arg Val Met Thr Arg Lys Asp Lys Ala Pro
50 55 60
Pro Phe Trp Arg Ser Glu Ser Pro Lys Cys Val Pro Pro Thr Tyr Thr
65 70 75 80
Ala Pro Ala Lys Gly Asp Ser Arg Gly Thr His Lys Met Thr Leu His
85 90 95
Phe Phe Pro Phe Leu Lys Ser Lys Ser Gln Asn Trp Arg Asn Leu Ser
100 105 110
Ala Ser Thr Gln Ser Pro Pro Ser Gln Ala Met Gly Ser Asn Arg Thr
115 120 125
Arg His Ser Met Ala Val Ser Met Leu Ser Arg Glu Asn Lys Gly Met
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<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (166).. (2244)

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-10165/13211-

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<211> 390

<212> PRT

<213> Homo sapiens

<400> 16244

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<400> 16245

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<211> 1895

<212> DNA

<213> Homo sapiens

<400> 16246

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<211> 1542

<212> DNA

<213> Homo sapiens

<400> 16247

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<211> 1543

<212> DNA

<213> Homo sapiens

<400> 16248

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<211> 1659

<212> DNA

<213> Homo sapiens

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 <211> 2339
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<210> 16259
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 <212> DNA
 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 16261
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<213> Homo sapiens

<400> 16261

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<210> 16262
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<213> Homo sapiens

<220>

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<400> 16262

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<210> 16263

<211> 120

<212> PRT

<213> Homo sapiens

<400> 16263

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Val Lys Thr Glu Pro Ala Asp Met Asn Glu Ser Cys Lys Gln Ser Gly
      35             40             45
Leu Ser Ser Leu Val Asn Gly Lys Ser Pro Ile Arg Ser Leu Met His
 50             55             60

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-10187/13211-

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			85					90						95	
Cys	Glu	Lys	Cys	Pro	Lys	Val	Phe	His	Leu	Thr	Cys	His	Val	Pro	Thr
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<210> 16264
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<400> 16264

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<211> 2093
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<213> Homo sapiens

<400> 16265

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<212> DNA

<213> Homo sapiens

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-10193/13211-

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<211> 1878

<212> DNA

<213> Homo sapiens

<400> 16274

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<211> 1742

<212> DNA

<213> Homo sapiens

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<211> 1712

<212> DNA

<213> Homo sapiens

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<212> DNA

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<400> 16287

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<210> 16288

<211> 279

<212> PRT

<213> Homo sapiens

<400> 16288

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-10207/13211-

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Ala Thr Lys Arg Ile Lys Tyr Leu Gly Ile Gln Leu Thr Lys Glu Val		
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 <212> PRT
 <213> Homo sapiens

<400> 16290

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Ala	Leu	Leu	Gly	Met	Ala	Thr	Ala	Tyr	Met	Ile	Leu	Lys	Gln	Thr	Pro
			100				105						110		
Arg	Ala	Arg	Asn	Gln	Leu	Lys	Arg	Ile	Ala	Lys	Met	Asp	Trp	Asn	Ala
			115				120					125			
Ile	Asp	Ala	Glu	Glu	Phe	Glu	Lys	Ser	Trp	Leu	Leu	Leu	Ala	Asp	Ile
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09629469-072800

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 <213> Homo sapiens

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 65 70 75 80
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 Arg Leu Glu Asp Asn Ser Glu Thr Asn Ala Cys His Ser Leu Ile Thr
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<210> 16293
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 <212> DNA
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<400> 16293

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<211> 1921

<212> DNA

<213> Homo sapiens

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<211> 1898

<212> DNA

<213> Homo sapiens

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<400> 16295

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09629459.072300

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<210> 16296

<211> 106

<212> PRT

<213> Homo sapiens

<400> 16296

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Leu Leu Cys Val Arg Cys Cys Ser Arg Pro Trp Gly Cys Ser Arg Glu
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Glu Asp Lys Val Thr Ala Phe Gly Glu Glu Leu Ser Ser Ser Glu Ser
          65             70             75             80

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Lys Leu Pro Pro Ser Ala Val Ser Thr Ser Arg Tyr Cys Phe Ile Ser
85 90 95
Leu Leu Ser Leu Phe Met Lys Leu Phe Gln
100 105

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<211> 2409
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (152).. (493)

<400> 16297
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cctgtggagg tagagggaca atttgtcatg gatgggaatg ggcttgaggg ccgggaagca 180
gggcatgatg gggcctcatt catcattttc ccgttatccc agcggcgtgc aggggagcag 240
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-10215/13211-

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<211> 114

<212> PRT

<213> Homo sapiens

<400> 16298

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35 40 45
Lys Glu Gly Gln Ala Glu Leu Trp Glu Ala Thr Ser Ser Arg Lys Pro
50 55 60
Ser Leu Ile His Pro Ser Gln Ala Val Ser Ile Cys Ser Gln Ile Ser
65 70 75 80
Thr Ala Leu Ile Leu Arg Ser Ala Ser Ile Ser Leu Pro Arg Leu Gln
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Ala Leu Leu Gly Pro Arg Leu Phe Leu Thr Cys Ala Gln Trp His Pro
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Cys Thr

<210> 16299

<211> 1220

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (52).. (1146)

<400> 16299

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 <211> 365
 <212> PRT
 <213> Homo sapiens

<400> 16300

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			20					25					30		
Ser	Val	Phe	Trp	Ser	Leu	Leu	Lys	Asn	Leu	Pro	Phe	Leu	Glu	His	Leu
			35				40					45			
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			50			55				60					
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			65			70				75					80
Asp	Ser	Glu	Val	Ala	Ala	Ile	Gly	Gln	Leu	Ala	Phe	Leu	Arg	His	Leu
				85					90					95	
Thr	Leu	Ala	Gln	Leu	Pro	Ser	Val	Leu	Thr	Gly	Ser	Gly	Leu	Val	Asn
			100					105					110		
Ile	Gly	Pro	Gln	Cys	Gln	Gln	Leu	Arg	Ser	Leu	Ser	Leu	Ala	Asn	Leu
			115				120					125			
Gly	Met	Met	Gly	Lys	Val	Val	Tyr	Met	Pro	Ala	Leu	Ser	Asp	Met	Leu
			130			135					140				
Lys	His	Cys	Lys	Arg	Leu	Arg	Asp	Leu	Arg	Leu	Glu	Gln	Pro	Tyr	Phe
				150						155					160
Ser	Ala	Asn	Ala	Gln	Phe	Phe	Gln	Ala	Leu	Ser	Gln	Cys	Pro	Ser	Leu
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Gln Arg Leu Cys Leu Val Ser Arg Ser Gly Thr Leu Gln Pro Asp Ala
180 185 190
Val Leu Ala Phe Met Ala Arg Cys Leu Gln Val Val Met Cys His Leu
195 200 205
Phe Thr Gly Glu Ser Leu Ala Thr Cys Lys Ser Leu Gln Gln Ser Leu
210 215 220
Leu Arg Arg Trp Gly Glu Val Thr Gly Arg Arg Pro Gln Leu Phe Thr
225 230 235 240
Glu Leu Arg Glu Glu Pro Ser Ala Arg Thr Ser Arg Ala Thr Gly Arg
245 250 255
Arg Gln Pro Cys Leu Pro Asp Ser Gly Val Val Cys Cys Pro Cys Gly
260 265 270
Arg Pro Leu Ala Val Ser Gly Ile Ile Leu Val Gly Val Ser Pro Ser
275 280 285
Leu Val Val Lys Thr Thr Cys Val Tyr Arg Val Leu Phe Lys Asn Leu
290 295 300
Asp Tyr Ala Ser Ile Phe Phe Leu Val Cys Leu Phe Glu Thr Glu Ser
305 310 315 320
His Ser Val Val Gln Ala Gly Val Gln Trp Arg Asp Leu Ser Ser Leu
325 330 335
Gln Pro Leu Leu Ser Gly Leu Gln Pro Gln Pro Pro Glu Gln Leu Glu
340 345 350
Asn Glu Leu Glu Ile Gly Phe Ser Tyr Cys Phe Val Ile
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<210> 16301
<211> 1644
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (273).. (1643)

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 <212> PRT
 <213> Homo sapiens

<400> 16302

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			20					25					30		
Leu	Lys	Lys	Gln	Leu	His	Glu	Leu	Gln	Ala	Lys	Ile	Thr	Ala	Leu	Ser
		35				40					45				
Glu	Lys	Gln	Lys	Arg	Val	Val	Glu	Gln	Leu	Arg	Lys	Asn	Leu	Ile	Val
	50				55					60					
Lys	Gln	Glu	Gln	Pro	Asp	Lys	Phe	Gln	Ile	Gln	Pro	Leu	Pro	Gln	Ser
65				70				75						80	
Glu	Asn	Lys	Leu	Gln	Thr	Ala	Gln	Gln	Gln	Pro	Leu	Gln	Gln	Leu	Gln
			85					90						95	
Gln	Gln	Gln	Gln	Tyr	His	His	His	His	Ala	Gln	Gln	Ser	Ala	Ala	Ala
			100				105						110		
Ser	Pro	Asn	Leu	Thr	Ala	Ser	Gln	Lys	Thr	Val	Thr	Thr	Ala	Ser	Met
		115					120					125			
Ile	Thr	Thr	Lys	Thr	Leu	Pro	Leu	Val	Leu	Lys	Ala	Ala	Thr	Ala	Thr
	130				135						140				
Met	Pro	Ala	Ser	Val	Val	Gly	Gln	Arg	Pro	Thr	Ile	Ala	Met	Val	Thr
145				150						155				160	
Ala	Ile	Asn	Ser	Gln	Lys	Ala	Val	Leu	Ser	Thr	Asp	Val	Gln	Asn	Thr
			165					170					175		
Pro	Val	Asn	Leu	Gln	Thr	Ser	Ser	Lys	Val	Thr	Gly	Pro	Gly	Ala	Glu
			180					185					190		

008240" 69462960

-10219/13211-

Ala	Val	Gln	Ile	Val	Ala	Lys	Asn	Thr	Val	Thr	Leu	Gln	Val	Gln	Ala
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	210					215					220				
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			245						250					255	
Ala	Pro	Gln	Leu	Ile	Gln	Arg	Pro	Val	Met	Leu	Thr	Lys	Phe	Thr	Pro
			260					265					270		
Thr	Thr	Leu	Pro	Thr	Ser	Gln	Asn	Ser	Ile	His	Pro	Val	Arg	Val	Val
		275					280					285			
Asn	Gly	Gln	Thr	Ala	Thr	Ile	Ala	Lys	Thr	Phe	Pro	Met	Ala	Gln	Leu
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Thr	Ser	Ile	Val	Ile	Ala	Thr	Pro	Gly	Thr	Arg	Leu	Ala	Gly	Pro	Gln
305					310					315					320
Thr	Val	Gln	Leu	Ser	Lys	Pro	Ser	Leu	Glu	Lys	Gln	Thr	Val	Lys	Ser
				325					330					335	
His	Thr	Glu	Thr	Asp	Glu	Lys	Gln	Thr	Glu	Ser	Arg	Thr	Ile	Thr	Pro
			340					345					350		
Pro	Ala	Ala	Pro	Lys	Pro	Lys	Arg	Glu	Glu	Asn	Pro	Gln	Lys	Leu	Ala
		355					360					365			
Phe	Met	Val	Ser	Leu	Gly	Leu	Val	Thr	His	Asp	His	Leu	Glu	Glu	Ile
	370					375					380				
Gln	Ser	Lys	Arg	Gln	Glu	Arg	Lys	Arg	Arg	Thr	Thr	Ala	Asn	Pro	Val
385					390					395					400
Tyr	Ser	Gly	Ala	Val	Phe	Glu	Pro	Glu	Arg	Lys	Lys	Ser	Ala	Val	Thr
				405					410					415	
Tyr	Leu	Asn	Ser	Thr	Met	His	Pro	Gly	Thr	Arg	Lys	Arg	Gly	Arg	Pro
			420					425					430		
Pro	Lys	Tyr	Asn	Ala	Val	Leu	Gly	Phe	Gly	Ala	Leu	Thr	Pro	Thr	Pro
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 <212> DNA
 <213> Homo sapiens

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<210> 16304
 <211> 2332
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1538).. (2050)

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          35          40          45
Leu Phe Cys Lys Thr Leu Gly Val Cys His Gly His Ala Leu Met Met
          50          55          60
Ser Thr Cys Val Arg Pro Leu Pro Pro Trp Ser Ala Cys Met Val Leu
          65          70          75          80
Gln Pro Glu Thr Ala Leu Gly Glu Ile Arg Gly Ser Leu Leu Val Gly
          85          90          95
Gly Glu His Leu Pro Leu His Ala Gly Arg His Leu Met Lys Pro Gln
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Arg Pro Gly Ser Pro Cys Thr Trp Lys Glu Ser Leu Ser Ser Met Trp
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 16337

<211> 1532

<212> DNA

<213> Homo sapiens

<400> 16337

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<211> 1901

<212> DNA

<213> Homo sapiens

<400> 16338

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<210> 16339

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 16339

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<210> 16341
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<221> CDS
<222> (790)..(1509)

<400> 16341

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 <212> PRT
 <213> Homo sapiens.

<400> 16342

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 <212> DNA
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<220>
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<400> 16343

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1549

<210> 16344

<211> 152

<212> PRT

<213> Homo sapiens

<400> 16344

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Cys	His	Val	Asn	Phe	Pro	Arg	Ser	Ile	Ser	Ser	Val	Ile	Pro	Tyr	Glu
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<211> 1587

<212> DNA

<213> Homo sapiens

<400> 16345

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<211> 2111

<212> DNA

<213> Homo sapiens

<400> 16346

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<211> 1529

<212> DNA

<213> Homo sapiens

<400> 16347

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<400> 16348
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<213> Homo sapiens

<400> 16349
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35 40 45
Lys Arg Val Gln Lys Ser Ile Ser Gln Lys Lys Leu Lys Leu Asp Ile
50 55 60

009240-07800

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<212> DNA

<213> Homo sapiens

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<210> 16352

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<212> DNA

<213> Homo sapiens

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<212> DNA

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<213> Homo sapiens

<400> 16353

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<212> DNA

<213> Homo sapiens

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<221> CDS

<222> (705).. (1157)

<400> 16354

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<400> 16356

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<212> PRT
<213> Homo sapiens

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Arg Tyr Phe Ile Leu Phe Val Ala Ile Met Asn Val Ser Leu Phe Met
50 55 60
Ile Trp Leu Tyr Ala Cys Met Leu Leu Val Tyr Arg Asn Ala Ser Asp
65 70 75 80
Phe Cys Thr Leu Ile Leu Tyr Pro Gln Ala Leu Leu Lys Leu Leu Ile
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 <213> Homo sapiens

<400> 16361

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<212> DNA

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<212> PRT
<213> Homo sapiens

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35 40 45
Thr Gln Pro Asp Ser Asp Ala Cys Gln Pro Ala Ser Pro Thr Arg Ala
50 55 60
Ala Ala Leu Pro Thr Arg Met Gly Gly Thr Thr Pro Pro Arg Cys Pro
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Arg Ala Glu Arg Ser Arg Gly Ser Thr Gly Ile Ala Arg Ala Ser Ala
85 90 95
Leu Ala Ala Gly Gly Ala Gly Val Leu Arg Gly Arg Asp Gln Ser Ala
100 105 110
Ile Arg Ala Ala Thr Pro Asp Leu Gly Arg Gln Leu Ser Ser His Cys
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<211> 1698
<212> DNA
<213> Homo sapiens

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<222> (357).. (659)

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<210> 16370
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Tyr Glu Phe Trp Gly Ile His Ile Gln Ser Ile Ala Cys His Pro Leu
 50 55 60
 Pro Pro Lys Ile Tyr Val Phe Leu Thr Ser Lys Arg His Cys Ile Pro
 65 70 75 80
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<210> 16371
 <211> 2051

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<212> DNA

<213> Homo sapiens

<400> 16371

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<210> 16372

<211> 1685

<212> DNA

<213> Homo sapiens

<400> 16372

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 <211> 1965
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (350).. (673)

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<210> 16375
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 16375
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 35 40 45
 Phe Thr Pro Ser Ala Gly Met Pro Trp Pro Gln Ala Val Ala Pro Ile
 50 55 60
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<210> 16376
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 <212> DNA
 <213> Homo sapiens

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<210> 16377
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 <212> DNA
 <213> Homo sapiens

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<210> 16378

<211> 2075

<212> DNA

<213> Homo sapiens

<400> 16378

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<210> 16383
 <211> 2035
 <212> DNA
 <213> Homo sapiens

<400> 16383

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<210> 16384
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 <212> DNA
 <213> Homo sapiens

<400> 16384

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<210> 16385
 <211> 1973
 <212> DNA
 <213> Homo sapiens

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Val Trp Leu Ser Gly Ile Tyr Arg Ile Val Phe Ser Leu Leu Ser Tyr			
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<210> 16387
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 <212> DNA
 <213> Homo sapiens

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 <222> (743).. (1837)

<400> 16387

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<210> 16388
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 <212> PRT
 <213> Homo sapiens

<400> 16388

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 Lys Asp Ser Asp Arg Ser Leu Val Leu Leu Gln Asn Ile Leu Leu Val
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 <212> DNA
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<220>
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 <222> (428).. (1753)

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<210> 16390
 <211> 442
 <212> PRT
 <213> Homo sapiens

<400> 16390

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Leu	Met	Gly	Tyr	Ser	Pro	Ala	Gly	Gly	Ala	Thr	Ser	Pro	Gly	Val	Tyr
		35					40					45			
Gln	Val	Ser	Ile	Phe	Ser	Pro	Pro	Ala	Gly	Thr	Ser	Glu	Pro	His	Arg
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Arg	Gly	Pro	Gly	Leu	Gly	Ala	Arg	Glu	Gly	Leu	Pro	Pro	Glu	Glu	Pro
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Ser	Thr	Val	Gly	Leu	Leu	Gly	Pro	Glu	Gly	Pro	Gly	Leu	Gly	Leu	Gly
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Val	Ala	Ser	Gln	His	Phe	Ser	His	Arg	Gly	Leu	Cys	Val	Val	Glu	Gln
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Arg	Ser	Ser	Val	Thr	Ser	Ser	Trp	Thr	Ser	Gly	Ala	Trp	Ser	Pro	Pro
		130					135				140				
Cys	Pro	Pro	Ser	Asn	Ala	Ser	Cys	Asn	Thr	Leu	His	Thr	Arg	Asp	Trp

09629469-072800

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Pro Ala Pro Pro Gly Gln Leu His Thr Leu Asp Thr Asp Leu His Ser						
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Leu Ala Gln Ile Gly Gly Lys Ser Pro Val Ala Gly Val Gly Asn Gly						
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Gly Ser Leu Trp Pro Arg Glu Ser Pro Gly Thr Ala Asn Gly His Ser						
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Pro Glu His Thr Pro Pro Gly Pro Gly Pro Pro Gly Pro Cys Pro Thr						
225		230		235		240
Lys Arg Arg Leu Leu Pro Ala Gly Glu Ala Pro Asp Val Ser Ser Glu						
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Glu Glu Gly Pro Ala Pro Arg Arg Arg Arg Gly Ser Leu Gly His Pro						
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Thr Ala Ala Asn Ser Ser Asp Ala Lys Ala Thr Pro Phe Trp Ser His						
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Leu Arg Ser Leu Arg Lys Gly Pro Gly Leu Leu Ser Pro Pro Ser Ala						
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Ser Pro Val Pro Thr Pro Ala Val Ser Arg Thr Leu Leu Gly Asn Phe						
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Glu Glu Ser Leu Leu Arg Gly Arg Phe Ala Pro Ser Gly His Ile Glu						
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Gly Phe Thr Ala Glu Ile Gly Ala Ser Gly Ser Tyr Cys Pro Gln His						
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Val Thr Leu Pro Val Thr Val Thr Phe Phe Asp Val Ser Glu Gln Asn						
385		390		395		400
Ala Pro Ala Pro Phe Leu Gly Ile Val Asp Leu Asn Pro Leu Gly Arg						
	405		410		415	
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<210> 16391
 <211> 2465
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (380).. (835)

09629469.072800

<400> 16391

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<210> 16392

<211> 152

<212> PRT

09629469-072800

<213> Homo sapiens

<400> 16392

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          35           40           45
Asp Lys Thr Ser Pro Glu Ala Phe Trp Leu His Gln Lys Thr Asp Gly
          50           55           60
Arg Pro Val Phe Thr Asp Ala Tyr Thr Ser Ser Trp Leu Pro Pro Thr
          65           70           75           80
Glu Val Ala Ser Val Gln Lys Phe Ile Pro Glu His Gln Ala Gly Gly
          85           90           95
Cys Gln Leu Leu Leu Arg Phe Arg Cys Ile Arg Lys Leu Met His Leu
          100          105          110
Val Gln Met Ser Arg Ser Gly Ser Asp Ser Pro Gly Leu Gly Ser Gly
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Asp Thr Asp Asp Ser Leu Glu Gln Ser Gly Phe Ser Arg Asn Gly Arg
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<210> 16393

<211> 1860

<212> DNA

<213> Homo sapiens

<400> 16393

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09629469.072800

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<210> 16394

<211> 1808

<212> DNA

<213> Homo sapiens

<400> 16394

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-10295/13211-

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<210> 16395

<211> 1387

<212> DNA

<213> Homo sapiens

<400> 16395

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<211> 1614

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1296).. (1595)

09629469.072800

<400> 16396

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<210> 16397

<211> 100

<212> PRT

<213> Homo sapiens

<400> 16397

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Thr Phe Pro Pro Leu Tyr Tyr Arg Arg Ala His Arg Arg Phe Val Thr
          35             40             45
Lys Lys Ala Leu Cys Ile Arg Val Phe Gln Glu Thr Gln Lys Leu Lys
          50             55             60
Lys Arg Arg Arg Ala Leu Lys Ala Ala Ala Ala Ala Gln Lys Gln Ala
          65             70             75             80
Lys Arg Arg Asn Pro Asp Ser Pro Ala Lys Ala Ile Pro Lys Thr Leu
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09629459.072800

Lys Asp Ser Gln
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<210> 16398
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<220>
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 <212> PRT
 <213> Homo sapiens

<400> 16405

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			20					25					30		
Ala	Gln	Phe	Ala	Met	Ala	Lys	Met	Trp	Asn	Gln	Pro	Lys	Tyr	Pro	Ser
			35				40					45			
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	50					55				60					
Tyr	Ser	Ala	Ile	Lys	Arg	Asn	Glu	Leu	Met	Ala	Phe	Ala	Val	Thr	Trp
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<400> 16407

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			20					25					30		
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			50			55					60				
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					70					75					80
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<400> 16408

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<210> 16409
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<222> (372).. (1604)

<400> 16409

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<400> 16410

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 <212> DNA
 <213> Homo sapiens

<400> 16411

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Tyr Leu Pro Ile Leu Phe Ile Asp Gln Leu Ser Asn Arg Val Lys Asp
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<213> Homo sapiens

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<210> 16425

<211> 2242

<212> DNA

<213> Homo sapiens

<400> 16425

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<210> 16426
 <211> 1803
 <212> DNA
 <213> Homo sapiens

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<210> 16427

<211> 2176

<212> DNA

<213> Homo sapiens

<400> 16427

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<210> 16428
 <211> 1488
 <212> DNA
 <213> Homo sapiens

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<210> 16429
 <211> 2080
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1024).. (1926)

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<210> 16430
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 <212> PRT
 <213> Homo sapiens

<400> 16430

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Pro	Asn	Phe	Ser	Leu	Glu	Ser	Arg	Asn	Ile	Gly	Arg	Pro	Ile	Glu	Met	35	40	45	
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Pro	Leu	Ser	Ser	Val	Trp	Val	Pro	Ala	Pro	Ser	Ser	Ala	Val	Ala	Ala	130	135	140	
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<210> 16431
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<212> DNA
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<221> CDS
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<211> 167

<212> PRT

<213> Homo sapiens

<400> 16432

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115 120 125
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<212> DNA

<213> Homo sapiens

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<211> 121

<212> PRT

<213> Homo sapiens

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<211> 1624

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<210> 16441
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (801).. (1121)

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<210> 16442
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 16442

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			20					25					30		
Val	Ser	Val	Tyr	Pro	Lys	Lys	Glu	Leu	Pro	Leu	Phe	Ile	His	Phe	Thr
			35					40					45		
Ala	Gly	Phe	Cys	Ser	Ser	Thr	Ala	Met	Ile	Ala	Ile	Leu	Thr	His	Gln
			50				55					60			
Phe	Pro	Glu	Ile	Met	Gly	Ile	Phe	Ala	Lys	Ala	Val	Leu	Gly	Leu	Trp
			65			70				75					80
Cys	Pro	Gln	Pro	Trp	Ala	Ser	Ser	Gly	Phe	Glu	Glu	Asn	Thr	Gln	Asp
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Leu	Lys	Ser	Glu	Asp	Leu	Gly	Leu	Ser	Ser	Gly					
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 <213> Homo sapiens

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 <222> (769).. (1170)

<400> 16443

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<210> 16444

<211> 134

<212> PRT

<213> Homo sapiens

<400> 16444

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Ala Glu Gln Pro Gly Cys Phe Gln Leu Cys Arg Gly Ala Arg Lys Ala
          35           40           45
Leu Leu Pro Gly Trp Leu Cys Arg Leu Asn Pro Leu Ser Pro Pro Gln
          50           55           60
Pro Ser Glu Ala Ser His Phe Ser Ser His Lys Ala Ala Pro Ala Arg
          65           70           75           80
Ser Thr Glu Ser Ala Ala Gln Trp Gly Ala Val Asp Pro His Lys Ala
          85           90           95
Ser His Cys Ser Cys Ser Ser Gln Asp Ser Gly Asp Leu Trp Asp Ser
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-10340/13211-

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<212> DNA
<213> Homo sapiens

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<222> (178).. (1002)

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<210> 16446
 <211> 275
 <212> PRT
 <213> Homo sapiens

<400> 16446
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 35 40 45
 Met Pro Asn Val Arg Glu Leu Ala Glu Ser Asp Phe Ala Ser Thr Phe
 50 55 60
 Arg Leu Leu Thr Val Phe Ala Tyr Gly Thr Tyr Ala Asp Tyr Leu Ala
 65 70 75 80
 Glu Ala Arg Asn Leu Pro Pro Leu Thr Glu Ala Gln Lys Asn Lys Leu
 85 90 95
 Arg His Leu Ser Val Val Thr Leu Ala Lys Val Lys Cys Ile Pro
 100 105 110
 Tyr Ala Val Leu Leu Glu Ala Leu Ala Leu Arg Asn Val Arg Gln Leu
 115 120 125
 Glu Asp Leu Val Ile Glu Ala Val Tyr Ala Asp Val Leu Arg Gly Ser
 130 135 140
 Leu Asp Gln Arg Asn Gln Arg Leu Glu Val Asp Tyr Ser Ile Gly Arg
 145 150 155 160
 Asp Ile Gln Arg Gln Asp Leu Ser Ala Ile Ala Arg Thr Leu Gln Glu
 165 170 175
 Trp Cys Val Gly Cys Glu Val Val Leu Ser Gly Ile Glu Glu Gln Val
 180 185 190
 Ser Arg Ala Asn Gln His Lys Glu Gln Gln Leu Gly Leu Lys Gln Gln
 195 200 205
 Ile Glu Ser Glu Val Ala Asn Leu Lys Lys Thr Ile Lys Val Thr Thr
 210 215 220
 Ala Ala Ala Ala Ala Ala Thr Ser Gln Asp Pro Glu Gln His Leu Thr
 225 230 235 240
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<210> 16447
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 <212> DNA

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<213> Homo sapiens

<400> 16447

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<210> 16448

<211> 2036

<212> DNA

<213> Homo sapiens

<400> 16448

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<210> 16449

<211> 2302

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 16456

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

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<210> 16463
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 16463

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			20					25					30		
Gln	Phe	Pro	Leu	Gln	Gln	Gly	Pro	Gly	Pro	Phe	His	Met	Met	Thr	Glu
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Pro	Val	His	Lys	Thr	Glu	Thr	Ala	Leu	Leu	His	Pro	Cys	Cys	Leu	Ser
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<210> 16464
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09629469 072800

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<400> 16464

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<210> 16465

<211> 1278

<212> DNA

<213> Homo sapiens

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<221> CDS

<222> (541).. (882)

<400> 16465

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<221> CDS
<222> (39).. (1037)

<400> 16467

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<212> PRT
<213> Homo sapiens

<400> 16468

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<211> 1955

09625469-072800

<212> DNA
<213> Homo sapiens

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<222> (525).. (1529)

<400> 16469

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Cys	Pro	Tyr	Thr	Tyr	Met	Ser	Tyr	Phe	Leu	Arg	Asn	Val	Thr	Asp	Thr
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<212> DNA

09629469 "072800

<213> Homo sapiens

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<222> (203).. (745)

<400> 16471

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<210> 16472

<211> 181

<212> PRT

<213> Homo sapiens

<400> 16472

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Trp Leu Ser Thr Tyr Val Ala Asp Ser Gly Ser Asn Gln Leu Leu Gly
      35             40             45
Ala Ile Val Ser Ala Gly Asp Thr Ser Val Leu His Leu Gly His Val

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His Pro Ser Glu Gly Asn Asp Glu Lys Ala Glu Glu Ala Gly Glu Gly		80
	85	90
Arg Gly Asp Ser Thr Gly Glu Ala Gly Ala Gly Gly Gly Val Glu Pro		95
	100	105
Ser Leu Glu His Leu Leu Asp Ile Gln Gly Leu Pro Lys Arg Gln Ala		110
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Gly Ala Gly Ser Ser Ser Pro Glu Ala Pro Leu Arg Ser Glu Asp Ser		125
	130	135
Thr Cys Leu Pro Pro Ser Pro Gly Leu Ile Thr Val Arg Leu Lys Phe		140
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 <212> DNA
 <213> Homo sapiens

<400> 16473

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<211> 155

<212> PRT

<213> Homo sapiens

<400> 16475

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35 40 45
Tyr Arg Gly Ala Lys Ala Ala Ile Val Cys Tyr Asp Leu Thr Asp Ser
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Ser Ser Phe Glu Arg Ala Lys Phe Trp Val Lys Glu Leu Arg Ser Leu
65 70 75 80
Glu Glu Gly Cys Gln Ile Tyr Leu Cys Gly Thr Lys Ser Asp Leu Leu
85 90 95
Glu Glu Asp Arg Arg Arg Arg Arg Val Asp Phe His Asp Val Gln Asp
100 105 110
Tyr Ala Asp Ser Ser Cys Ser Ser Ala Leu Trp Gly Val Gly Val Cys
115 120 125
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<211> 1728

<212> DNA

<213> Homo sapiens

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<222> (153).. (671)

<400> 16476

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<210> 16477
 <211> 173
 <212> PRT
 <213> Homo sapiens

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<400> 16477
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          35             40             45
Gly Ile Ser Ile Leu Glu Lys Leu Ile Lys Thr Cys Pro Val Trp Leu
          50             55             60
Gln Leu Ser Leu Gly Gln Ala Glu Val Ala Arg Ile Leu His Arg Val
          65             70             75             80
Val Ala Gly Met Phe Leu Val Arg Arg Asp Ser Ser Ser Lys Gln Leu
          85             90             95
Val Leu Cys Val His Phe Pro Ser Leu Asn Glu Ser Ser Ala Glu Val
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<210> 16478

<211> 2090

<212> DNA

<213> Homo sapiens

<400> 16478

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<212> DNA
<213> Homo sapiens

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 Trp Asp Leu Ile Ile Leu Lys Ser Phe Cys Thr Ala Lys Glu Thr Asn
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 Arg Ala Asn Arg Gln Pro Thr Glu Trp Glu Lys Ile Phe Ala Ile Cys
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 Ala Ser Glu Lys Gly Leu Lys Ser Ser Ile Tyr Lys Glu Leu Asn Lys
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 Phe Lys Arg Lys Lys Lys Gln Pro Ile Lys Arg Trp Ala Lys Asp Met
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<210> 16481
 <211> 2107
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (124)..(1164)

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-10371/13211-

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<210> 16488
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 <212> PRT
 <213> Homo sapiens

<400> 16488

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			20					25					30		
Leu	Gln	Glu	Arg	Gly	Gly	Gly	Thr	Arg	Gly	Gly	Pro	Ile	Pro	Gln	Gly
			35				40					45			
Thr	Arg	Arg	Pro	Thr	Leu	Gly	Phe	Gly	Thr	His	Ala	Trp	Tyr	Tyr	Leu
			50			55					60				
Asn	Leu	Lys	Ala	Leu	Leu	Asp	Ser	Gly	Gly	Ala	Asp	Gln	Arg	Pro	Phe
					70					75					80
Ala	Val	Leu	Glu	Cys	Ser	Tyr	Val	Cys	Leu	Ala	Asp	Arg	Val	Val	Phe
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Leu	Leu	Leu	Pro	Phe	Pro	Leu	Arg	Pro	Pro	Ser	Pro	His	Cys	Pro	Pro
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 <212> DNA
 <213> Homo sapiens

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 <221> CDS
 <222> (112).. (1260)

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<210> 16491
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 <212> PRT
 <213> Homo sapiens

<400> 16491

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			20					25					30		
Trp	Lys	Ala	Val	Ile	Gln	Val	Arg	Gln	Lys	Thr	Leu	His	Lys	Lys	Thr
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-10380/13211-

				85					90				95				
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 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (80).. (1084)

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<400> 16492

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<210> 16493

<211> 335

<212> PRT

<213> Homo sapiens

<400> 16493

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<400> 16494

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<210> 16495
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 16495
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 35 40 45
 Val Thr Ala Gly Arg Trp Gly Trp Ala Ser Tyr Pro Lys Glu Ser Pro
 50 55 60
 Gly Ala Val Pro Arg Arg Glu Asn Gly Cys Gly Ala Glu Gln Thr Val
 65 70 75 80
 Asp Val Tyr Leu Thr Gln Pro Asp Lys Thr Ala Cys Lys Asn Gln Ala
 85 90 95
 Tyr Gly Pro Ala Pro Leu Cys Arg Pro Thr Leu Tyr Thr Pro Glu Met
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<210> 16496
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 <212> DNA
 <213> Homo sapiens

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 Val Lys Val Ala Thr Gln Glu Gly Lys Glu Ile Thr Cys Arg Ser Tyr
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 Leu Met Thr Asn Tyr Glu Ser Ala Pro Pro Ser Pro Gln Tyr Lys Lys
 65 70 75 80
 Ile Ile Cys Met Gly Ala Lys Glu Asn Gly Leu Pro Leu Glu Tyr Gln
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 35 40 45
 Val Cys Glu Ser Gly Lys Ala Ser Arg Gly Glu Pro Ser Arg Val Ala
 50 55 60
 Leu Trp Gly Gly Ser Ser Gly Ser Gly Asn Gly Thr Leu Thr Ala Leu
 65 70 75 80
 Leu Lys Pro Glu Gly Tyr Phe Ile Gln Gly Arg Gln Leu Ala Cys Val
 85 90 95
 Gly Thr Gln Glu Ser Ser Phe Ser Phe Ser Gly Arg Cys Ser Ser
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35 40 45

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Thr His Leu Leu Glu Asn Leu Arg Ser Ser Ile Cys Pro Glu Glu Gly
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Val Glu Phe Gln Gly Arg Thr Leu Gly Ala Leu Glu Ser Leu Thr Leu
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Lys Tyr Ala Glu Gln Arg Ile Pro Thr Leu Asn Glu Tyr Cys Val Val		270
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Cys Asp Glu Gln His Val Phe Gln Asn Gly Ser Met Leu Lys Pro Ala		285
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<213> Homo sapiens

<400> 16521

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 <212> PRT
 <213> Homo sapiens

<400> 16523

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			20					25					30		
Lys	Glu	Pro	Leu	Gly	Arg	Ala	Glu	Arg	Pro	Gly	Arg	Pro	Cys	Thr	Arg
			35				40					45			
Leu	Gln	Pro	Ala	Gly	Ser	Val	Ser	Ser	Thr	Pro	Leu	Ser	Thr	Pro	Cys
			50			55					60				
Ser	Ser	Val	Pro	Ser	Ser	Pro	Ser	Phe	Ser	Pro	Thr	Glu	Gln	Lys	Thr
					70					75				80	
His	Leu	Glu	Asp	Leu	Tyr	Trp	Met	Ala	Ser	Asn	Tyr	Gln	Gln	Met	Asn
				85					90					95	
Pro	Glu	Ala	Leu	Asn	Leu	Thr	Pro	Glu	Asp	Ala	Val	Glu	Ala	Leu	Ile
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225 230 235 240
Gln Lys Arg Arg Thr Leu Lys Asn Arg Gly Tyr Ala Gln Ser Cys Arg
245 250 255
Tyr Lys Arg Val Gln Gln Lys His His Leu Glu Asn Glu Lys Thr Gln
260 265 270
Leu Ile Gln Gln Val Glu Gln Leu Lys Gln Glu Val Ser Arg Leu Ala
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<212> PRT
<213> Homo sapiens

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			20					25					30		
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Pro	Ser
			35				40					45			
Ser	Trp	Asp	Tyr	Arg	His	Val	Pro	Pro	Arg	Pro	Ala	Asn	Phe	Val	Phe
	50					55					60				
Leu	Val	Glu	Met	Gly	Phe	Leu	His	Ile	Gly	Gln	Ala	Gly	Cys	Glu	Leu
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Pro	Thr	Ser	Gly	Asp	Leu	Pro	Ala	Ser	Ala	Ser	Gln	Ser	Ala	Gly	Ile
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<212> DNA
<213> Homo sapiens

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<400> 16527

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<212> PRT

<213> Homo sapiens

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Trp Val Ala Gly Gly Gly Glu Gly Asn Arg Leu Gln Phe Ser Gly Met
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<212> PRT

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 Glu Val Ala Glu Ala Val Gln Gln Glu Leu Glu Val Pro Ser Ser Arg
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 Thr Gly Ser Ser Thr Ser Glu Thr Gly Ser Gly Leu Ala Gly Thr Pro
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 Ser Gly Leu Val Trp Gly Ile Arg Arg Trp Glu Val Asp Gly Ser Tyr
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 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 16541

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			20					25					30		
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			35				40					45			
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			50				55				60				
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Ser	Leu	Gln	Arg	Ala	Trp	Thr	Val	Gly	Trp	Cys	Val	Glu	Leu	Val	Arg
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<220>
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 <222> (890).. (1267)

<400> 16542

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 <213> Homo sapiens

<400> 16543

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			20					25					30		
Thr	Phe	Leu	Lys	Asp	Ala	Pro	Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser
			35				40					45			
Thr	Gly	Arg	Val	Ser	Leu	Ser	Ala	Ile	Arg	Ala	Val	Ala	Lys	Asn	Thr
	50					55					60				
Thr	Pro	Gly	Ala	Ala	Leu	Pro	Ala	Gly	Glu	Trp	Gly	Thr	Val	Gln	Leu
	65				70					75				80	
Ala	Ala	Ser	Ala	Ser	Leu	Cys	Ile	Ser	Thr	Ala	Gly	Pro	Val	Thr	Pro
				85				90						95	
Ser	Ser	Thr	Pro	Ser	Ala	Ser	Ile	Ser	Ser	Arg	Ser	Gln	Arg	Val	Glu
			100					105					110		
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<211> 1423
<212> DNA
<213> Homo sapiens

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<211> 218
<212> PRT
<213> Homo sapiens

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Gly Glu Phe Lys Asp Ala Leu Arg Asn Ser Gly Gly Asp Gly Leu Gly
85 90 95
Gln Met Ser Leu Glu Phe Tyr Gln Lys Lys Lys Ser Arg Trp Pro Phe
100 105 110
Ser Asp Glu Cys Ile Pro Trp Glu Val Trp Thr Val Lys Val His Val
115 120 125
Val Ala Leu Ala Thr Glu Gln Glu Arg Gln Ile Cys Arg Glu Lys Val
130 135 140
Gly Glu Lys Leu Cys Glu Lys Ile Ile Asn Ile Val Glu Val Met Asn
145 150 155 160
Arg His Glu Tyr Leu Pro Lys Met Pro Thr Gln Ser Glu Val Asp Asn
165 170 175
Val Phe Asp Thr Gly Leu Arg Asp Val Gln Pro Tyr Leu Tyr Lys Ile
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<212> DNA
<213> Homo sapiens

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<210> 16549

<211> 416

<212> PRT

<213> Homo sapiens

<400> 16549

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             20             25             30
Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Ser
             35             40             45
Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Leu Thr
             50             55             60
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<222> (61).. (429)

<400> 16550

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<210> 16551
<211> 123
<212> PRT
<213> Homo sapiens

<400> 16551

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          20             25             30
Asn Ala Val Ala Arg Ser Gln Leu Thr Ala Thr Ser Ala Ser Gln Val
          35             40             45
Gln Ala Ile Leu Leu Val Ser Ala Ser Gly Val Ala Gly Ile Ile Gly

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50		55		60	
Thr Cys His His Ala Gln Pro Ile Phe Val Phe Leu Val Glu Met Gly					
65		70		75	80
Phe His His Val Gly Gln Ala Cys Leu Lys Leu Leu Asn Ser Gly Asp					
	85		90		95
Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His					
	100		105		110
His Ala Arg Pro Phe Phe Phe Phe Phe Ser Phe					
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 <212> DNA
 <213> Homo sapiens

<400> 16552

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<213> Homo sapiens

<220>

<221> CDS

<222> (1107).. (1505)

<400> 16553

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<210> 16554

<211> 133

<212> PRT

<213> Homo sapiens

<400> 16554

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Glu Thr Gly Ser Cys Ser Val Ala Glu Ala Gly Val Gln Trp His Tyr
          20             25             30
Leu Ser Ser Leu Gln Pro Lys Pro Lys Leu Lys Leu Ser Ser Arg
          35             40             45
Ile Ser Leu Leu Ser Gly Trp Asp Cys Arg His Met Leu Pro His Pro

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-10430/13211-

50 55 60
Ala Ile Phe Phe Val Phe Phe Val Glu Met Gly Ser His Tyr Val Ala
65 70 75 80
Gln Ala Gly Leu Glu Leu Pro Gly Ser Ser Ser Pro Pro Thr Ser Ala
85 90 95
Thr Arg Glu Ala Glu Ala Gly Glu Trp Arg Glu Pro Gly Gly Ala Glu
100 105 110
Leu Ala Val Ser Arg Asp His Ala Thr Ala Leu Gln Pro Gly Arg Gln
115 120 125
Ser Lys Thr Pro Ser
130

<210> 16555
<211> 1074
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (67).. (690)

<400> 16555
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<210> 16556
<211> 208
<212> PRT
<213> Homo sapiens

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<400> 16556

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          20           25           30
Ala Ser Ser Pro Ser Val Ser Ser Leu Cys Pro Leu Ser Ala Trp Pro
          35           40           45
Asp Pro Tyr Pro Pro Ala Leu Leu Phe Leu Leu Tyr Ile Leu Gly Ser
          50           55           60
Gly Gly Gln Gly Arg Glu Gly Thr Cys Gln Ala Arg Pro Gly Ala Pro
          65           70           75           80
Gly Pro Asp Pro His His Ala Asp Pro Gly Leu Gln Phe Leu Thr Met
          85           90           95
Val Pro Ser Ile Pro Asp Pro Glu Cys Phe Arg Ala Thr Leu Cys Val
          100          105          110
Leu Leu Gln Cys Val Leu Ser Val His Pro Ser Leu Pro Ser Val Pro
          115          120          125
Asp Thr Val Ser Pro Gln Pro Gly Arg Gly Asn Glu Leu Gln Pro Leu
          130          135          140
Ser Asn Arg Thr Cys Leu Pro Arg Pro His Pro His Phe Ser Gln Lys
          145          150          155          160
Ala Asp Asp Gly Glu Leu Gly Met Gly Ser Ser Arg Arg Ser Pro Glu
          165          170          175
Ser Phe Gln Leu Arg Glu Ser Ser Leu Gly Trp Ser Gly His His Ser
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Gln Gly Gly Leu Trp Val Ser Asp Ala Leu Arg Arg Val Pro Ser Leu
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<210> 16557

<211> 2281

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (44).. (550)

<400> 16557

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008240"69462960

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 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 16558
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 Phe Val His Leu Asn His Pro Leu His Ile Ser Asp Arg Val Ile Leu
 35 40 45
 Ile Ser Leu His Glu Ala Val Arg Phe Ser Phe Ala Phe Ser Phe Pro
 50 55 60
 Arg Gly Thr Leu Ser Ile Ala Tyr Cys Leu Met Ser Ser Val Ser Thr
 65 70 75 80

09629469.072300

Ser Ser Glu Ala Ile Met Ser Thr Glu Leu Leu Ala Asn Tyr Cys His
85 90 95
Ser Ser Leu His Val Cys Ile Cys Ile Ser Ser Phe Pro Asn Glu Thr
100 105 110
Gly Asn His Asp Ser Phe Pro Gly Ala Val Val Ser Ile Ser Asp Gln
115 120 125
Pro Thr Asp Gln Cys Lys Leu Ala Ala Lys Glu Leu Pro Leu Arg Asn
130 135 140
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145 150 155 160
Asn Leu Gly Val Ile Gly Thr Glu Arg
165

<210> 16559
<211> 1702
<212> DNA
<213> Homo sapiens

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<221> CDS
<222> (899).. (1576)

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<210> 16560

<211> 226

<212> PRT

<213> Homo sapiens

<400> 16560

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Ala Gln Leu Ala Gly Ser Arg Arg Arg Ala Asp Ser Asp Arg Ile Gln
35 40 45
Pro Ser Ala Asp Arg Ala Ser Ser Leu Ser Arg Pro Trp Glu Lys Thr
50 55 60
Asp Lys Gly Ala Thr Tyr Thr Pro Gln Ala Pro Lys Lys Leu Thr Pro
65 70 75 80
Thr Glu Lys Gly Arg Cys Ala Ser Leu Glu Glu Ile Leu Ser Gln Arg
85 90 95
Asp Ala Ala Ser Ala Arg Thr Leu Gln Leu Arg Ala Glu Glu Pro Pro
100 105 110
Thr Pro Ala Leu Pro Asn Pro Gly Gln Leu Ser Arg Ile Gln Asp Leu
115 120 125
Val Ala Arg Lys Leu Glu Glu Thr Gln Glu Leu Leu Ala Glu Val Gln
130 135 140
Gly Leu Gly Asp Gly Lys Arg Lys Ala Lys Asp Pro Pro Arg Ser Pro
145 150 155 160
Pro Asp Ser Glu Ser Glu Gln Leu Leu Leu Glu Thr Glu Arg Leu Leu
165 170 175
Gly Glu Ala Ser Ser Asn Trp Ser Gln Ala Lys Arg Val Leu Gln Glu
180 185 190
Val Arg Glu Leu Arg Asp Leu Tyr Arg Gln Met Asp Leu Gln Thr Pro
195 200 205
Asp Ser His Leu Arg Gln Thr Thr Pro His Ser Gln Tyr Arg Lys Ser
210 215 220
Leu Met
225

<210> 16561

<211> 1492

<212> DNA

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Gly Thr Ala Pro Ser Pro Gly Arg Val Ser Pro Pro Thr Pro Ala Arg
35 40 45
Gly Glu Pro Glu Val Thr Val Glu Ile Gly Glu Thr Tyr Leu Cys Arg
50 55 60

-10436/13211-

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Asn	Arg	Arg	Leu	Asp	Glu	Trp	Val	Asp	Lys	Asn	Arg	Leu	Ala	Leu	Thr
			100					105					110		
Lys	Thr	Val	Lys	Asp	Ala	Val	Gln	Lys	Asn	Ser	Glu	Lys	Tyr	Leu	Ser
		115					120						125		
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		130				135					140				
Lys	His	Asp	Glu	Ile	Asn	His	Val	Gln	Lys	Thr	Tyr	Ala	Glu	Met	Asp
145					150					155					160
Pro	Thr	Thr	Ala	Ala	Leu	Glu	Lys	Glu	His	Glu	Ala	Ile	Thr	Lys	Val
			165					170						175	
Lys	Tyr	Val	Asp	Lys	Ile	His	Ile	Gly	Asn	Tyr	Glu	Ile	Asp	Ala	Trp
			180					185					190		
Tyr	Phe	Ser	Pro	Phe	Pro	Glu	Asp	Tyr	Gly	Lys	Gln	Pro	Lys	Leu	Trp
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Leu	Cys	Glu	Tyr	Cys	Leu	Lys	Tyr	Met	Lys	Tyr	Glu	Lys	Ser	Tyr	Arg
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Phe	His	Leu	Gly	Gln	Cys	Gln	Trp	Arg	Gln	Pro	Pro	Gly	Lys	Glu	Ile
225					230					235					240
Tyr	Arg	Lys	Ser	Asn	Ile	Ser	Val	Tyr	Glu	Val	Asp	Gly	Lys	Asp	His
				245					250					255	
Lys	Ile	Tyr	Cys	Gln	Asn	Leu	Cys	Leu	Leu	Ala	Lys	Leu	Phe	Leu	Asp
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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

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Gly Lys Phe Gly Val Ile Cys Leu Glu Asp Leu Ile His Glu Ile Ala
      50             55             60
Phe Pro Gly Lys Arg Phe Gln Glu Ile Ser Trp Phe Leu Cys Pro Phe
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His Leu Ser Val Ala Arg His Ala Thr Lys Asn Arg Val Gly Phe Leu
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g g a c a c t c t g g a c c t t g t a g c t c c t c a a g c t t c c c t g t c t a t t g a g c a g a t a g g a a g c c g 240
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Leu Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu
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<400> 16595

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Gln Glu Phe Lys Ala His Lys Ser Val Leu Ala Ala Arg Ser Pro Val
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<212> DNA

<213> Homo sapiens

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			20					25					30		
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<212> PRT
<213> Homo sapiens

<400> 16602

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          35             40             45
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 260 265 270
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<212> DNA

<213> Homo sapiens

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<211> 314

<212> PRT

<213> Homo sapiens

<400> 16610

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<211> 1650

<212> DNA

<213> Homo sapiens

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<211> 1861

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<212> DNA

<213> Homo sapiens

<400> 16612

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<211> 1592

<212> DNA

<213> Homo sapiens

<400> 16613

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<211> 1860

<212> DNA

<213> Homo sapiens

<400> 16614

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<213> Homo sapiens

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<210> 16618
 <211> 1811
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (323).. (1708)

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<211> 462
<212> PRT
<213> Homo sapiens

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20 25 30
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35 40 45
Leu Ala Glu Gly Phe Gln Val Arg Met Phe Glu Phe Gln Asn Phe Glu
50 55 60
Arg Arg Phe Glu Glu Cys Ile Ser Gln Ser Ala Val Lys Thr Lys Phe
65 70 75 80
Glu Gln His Thr Val Arg Ala Lys Gln Ile Ala Glu Ala Val Arg Leu
85 90 95
Ile Met Asp Ser Leu His Met Ala Ala Arg Glu Gln Gln Val Tyr Cys
100 105 110
Glu Glu Met Arg Glu Glu Arg Gln Asp Arg Leu Lys Phe Ile Asp Lys
115 120 125
Gln Leu Glu Leu Leu Ala Gln Asp Tyr Lys Leu Arg Ile Lys Gln Ile
130 135 140
Thr Glu Glu Val Glu Arg Gln Val Ser Thr Ala Met Ala Glu Glu Ile
145 150 155 160
Arg Arg Leu Ser Val Leu Val Asp Asp Tyr Gln Met Asp Phe His Pro
165 170 175
Ser Pro Val Val Leu Lys Val Tyr Lys Asn Glu Leu His Arg His Ile
180 185 190
Glu Glu Gly Leu Gly Arg Asn Met Ser Asp Arg Cys Ser Thr Ala Ile

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195	200	205
Thr Asn Ser Leu Gln Thr Met Gln Gln Asp Met Ile Asp Gly Leu Lys		
210	215	220
Pro Leu Leu Pro Val Ser Val Arg Ser Gln Ile Asp Met Leu Val Pro		
225	230	235
Arg Gln Cys Phe Ser Leu Asn Tyr Asp Leu Asn Cys Asp Lys Leu Cys		
245	250	255
Ala Asp Phe Gln Glu Asp Ile Glu Phe His Phe Ser Leu Gly Trp Thr		
260	265	270
Met Leu Val Asn Arg Phe Leu Gly Pro Lys Asn Ser Arg Arg Ala Leu		
275	280	285
Met Gly Tyr Asn Asp Gln Val Gln Arg Pro Ile Pro Leu Thr Pro Ala		
290	295	300
Asn Pro Ser Met Pro Pro Leu Pro Gln Gly Ser Leu Thr Gln Glu Glu		
305	310	315
Phe Met Val Ser Met Val Thr Gly Leu Ala Ser Leu Thr Ser Arg Thr		
325	330	335
Ser Met Gly Ile Leu Val Val Gly Gly Val Val Trp Lys Ala Val Gly		
340	345	350
Trp Arg Leu Ile Ala Leu Ser Phe Gly Leu Tyr Gly Leu Leu Tyr Val		
355	360	365
Tyr Glu Arg Leu Thr Trp Thr Thr Lys Ala Lys Glu Arg Ala Phe Lys		
370	375	380
Arg Gln Phe Val Glu His Ala Ser Glu Lys Leu Gln Leu Val Ile Ser		
385	390	395
Tyr Thr Gly Ser Asn Cys Ser His Gln Val Gln Gln Glu Leu Ser Gly		
405	410	415
Thr Phe Ala His Leu Cys Gln Gln Val Asp Val Thr Arg Glu Thr Leu		
420	425	430
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435	440	445
Phe Leu Cys Ser Phe Ala Gly Ala Gln Asp Val Leu Thr Gln		
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (370).. (1275)

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actaaaagtg agaattggcct acagaatgaa agtttaagtt ccacacatca tacagatggc 660
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<210> 16621
 <211> 302
 <212> PRT
 <213> Homo sapiens

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Gln Glu Glu Ser Asp Pro Arg Tyr Lys Arg Asn Ile Cys Ser Val Lys
             35             40             45
Tyr Ser Val Lys Lys Ile Asn His Thr Ala Ser Glu Asn Glu Glu Phe
             50             55             60
Asn Lys Gly Glu Ser Thr Ser Gln Lys Val Ala Asp Arg Thr Lys Ser
             65             70             75             80
Glu Asn Gly Leu Gln Asn Glu Ser Leu Ser Ser Thr His His Thr Asp
             85             90             95
Gly Leu Ser Lys Ile Arg Leu Asn Tyr Gly Asp Glu Ser Pro Glu Ala
             100            105            110
Gly Lys Met Leu Glu Asp Glu Leu Val Asp Phe Ser Glu Asp Gln Asp
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145					150					155					160
Pro	Cys	Ile	Leu	Leu	Met	Asp	Ser	Leu	Arg	Gly	Pro	Ser	Arg	Ser	Asn
				165					170					175	
Val	Val	Lys	Ile	Leu	Arg	Glu	Tyr	Leu	Glu	Val	Glu	Trp	Glu	Val	Lys
			180					185					190		
Lys	Gly	Ser	Lys	Arg	Ser	Phe	Ser	Lys	Asp	Val	Met	Lys	Gly	Ser	Asn
	195						200				205				
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Leu	Gln	Tyr	Val	Glu	Ser	Phe	Phe	Glu	Asn	Pro	Ile	Leu	Ser	Phe	Glu
225					230					235					240
Leu	Pro	Met	Asn	Leu	Ala	Asn	Trp	Phe	Pro	Pro	Pro	Arg	Met	Arg	Thr
			245						250					255	
Lys	Arg	Glu	Glu	Ile	Arg	Asn	Ile	Ile	Leu	Lys	Leu	Gln	Glu	Asp	Gln
			260					265					270		
Ser	Lys	Glu	Lys	Arg	Lys	His	Lys	Asp	Thr	Tyr	Ser	Thr	Glu	Ala	Pro
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (30).. (704)

<400> 16622

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<210> 16623
 <211> 225
 <212> PRT
 <213> Homo sapiens

<400> 16623

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			20					25					30		
Gln	His	Tyr	Tyr	Gly	Asp	Leu	Glu	Tyr	Val	Leu	Ile	Pro	His	Gly	Ile
			35				40					45			
Ile	Val	Asp	Arg	Ile	Glu	Arg	Leu	Ala	Lys	Asp	Ile	Met	Lys	Asp	Ile
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Phe	Cys	Ala	Asp	Leu	Val	Glu	His	Leu	Lys	Asn	Ile	Ser	Arg	Asn	Ser
				85						90				95	
Asp	Arg	Phe	Val	Ser	Met	Lys	Val	Asp	Phe	Ile	Arg	Leu	Lys	Ser	Tyr
			100					105					110		
Arg	Asn	Asp	Gln	Ser	Met	Gly	Glu	Met	Gln	Ile	Ile	Gly	Gly	Asp	Asp
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Leu	Ser	Thr	Leu	Ala	Gly	Lys	Asn	Val	Leu	Ile	Val	Glu	Asp	Val	Val
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Gly	Thr	Gly	Arg	Thr	Met	Lys	Ala	Leu	Leu	Ser	Asn	Ile	Glu	Lys	Tyr
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			180					185					190						
Leu	Phe	Val	Val	Gly	Tyr	Ala	Leu	Asp	Tyr	Asn	Glu	Tyr	Phe	Arg	Asp				
		195					200				205								
Leu	Asn	His	Ile	Cys	Val	Ile	Asn	Glu	His	Gly	Lys	Glu	Lys	Tyr	Arg				
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Val																			
225																			

<210> 16624
 <211> 3391
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (315).. (2459)

<400> 16624

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